

## RATING

## DC type

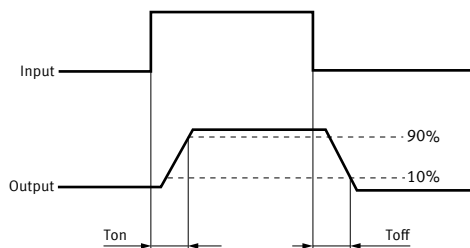
## ■ Absolute maximum ratings (Ambient temperature: 25°C)

| Item                            |                              | Symbol     | AQZ102        | AQZ105 | AQZ107 | AQZ104 | Remarks                                     |
|---------------------------------|------------------------------|------------|---------------|--------|--------|--------|---------------------------------------------|
| Input                           | LED forward current          | $I_F$      | 50 mA         |        |        |        |                                             |
|                                 | LED reverse voltage          | $V_R$      | 5 V           |        |        |        |                                             |
|                                 | Peak forward current         | $I_{FP}$   | 1 A           |        |        |        | $f = 100 \text{ Hz}$ ,<br>Duty Ratio = 0.1% |
|                                 | Power dissipation            | $P_{in}$   | 75 mW         |        |        |        |                                             |
| Output                          | Load voltage (DC)            | $V_L$      | 60 V          | 100 V  | 200 V  | 400 V  |                                             |
|                                 | Continuous load current (DC) | $I_L$      | 4.0 A         | 2.6 A  | 1.3 A  | 0.7 A  |                                             |
|                                 | Peak load current            | $I_{peak}$ | 9.0 A         | 6.0 A  | 3.0 A  | 1.5 A  | 100 ms (1 shot),<br>$V_L = \text{DC}$       |
|                                 | Power dissipation            | $P_{out}$  | 1.35 W        |        |        |        |                                             |
| Total power dissipation         |                              | $P_T$      | 1.35 W        |        |        |        |                                             |
| I/O isolation voltage           |                              | $V_{iso}$  | 2,500 Vrms    |        |        |        |                                             |
| Ambient temperature (Operating) |                              | $T_{opr}$  | -40 to +85°C  |        |        |        | (Avoid icing and condensation)              |
| Ambient temperature (Storage)   |                              | $T_{stg}$  | -40 to +100°C |        |        |        |                                             |

## ■ Electrical characteristics (Ambient temperature: 25°C)

| Item                     |                                  |         | Symbol            | AQZ102                                   | AQZ105  | AQZ107  | AQZ104  | Condition                                                                              |                                                                           |
|--------------------------|----------------------------------|---------|-------------------|------------------------------------------|---------|---------|---------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Input                    | LED operate current              | Typical | I <sub>Fon</sub>  | 1.0 mA                                   |         |         |         | I <sub>L</sub> = 100 mA                                                                |                                                                           |
|                          |                                  | Maximum |                   | 3.0 mA                                   |         |         |         | V <sub>L</sub> = 10 V                                                                  |                                                                           |
|                          | LED turn off current             | Minimum | I <sub>Foff</sub> | 0.4 mA                                   |         |         |         | I <sub>L</sub> = 100 mA                                                                |                                                                           |
|                          |                                  | Typical |                   | 0.9 mA                                   |         |         |         | V <sub>L</sub> = 10 V                                                                  |                                                                           |
|                          | LED dropout voltage              | Typical | V <sub>F</sub>    | 1.25 V(1.16 V at I <sub>F</sub> = 10 mA) |         |         |         | I <sub>F</sub> = 50 mA                                                                 |                                                                           |
|                          |                                  | Maximum |                   | 1.5 V                                    |         |         |         |                                                                                        |                                                                           |
| Output                   | On resistance                    | Typical | R <sub>on</sub>   | 0.05 Ω                                   | 0.081 Ω | 0.34 Ω  | 1.06 Ω  | I <sub>F</sub> = 10 mA<br>I <sub>L</sub> = Max.<br>Within 1 s                          |                                                                           |
|                          |                                  | Maximum |                   | 0.09 Ω                                   | 0.17 Ω  | 0.55 Ω  | 1.6 Ω   |                                                                                        |                                                                           |
|                          | Off state leakage current        | Maximum | I <sub>Leak</sub> | 10 μA                                    |         |         |         | I <sub>F</sub> = 0 mA<br>V <sub>L</sub> = Max.                                         |                                                                           |
| Transfer characteristics | Turn on time*                    | Typical | T <sub>on</sub>   | 1.66 ms                                  | 1.89 ms | 0.83 ms | 1.01 ms | I <sub>F</sub> = 10 mA<br>I <sub>L</sub> = 100 mA<br>V <sub>L</sub> = 10 V             |                                                                           |
|                          |                                  | Maximum |                   | 5.0 ms                                   |         |         |         |                                                                                        |                                                                           |
|                          |                                  | Typical |                   | 3.79 ms                                  | 4.50 ms | 1.75 ms | 2.34 ms |                                                                                        | I <sub>F</sub> = 5 mA<br>I <sub>L</sub> = 100 mA<br>V <sub>L</sub> = 10 V |
|                          |                                  | Maximum |                   | 10.0 ms                                  |         |         |         |                                                                                        |                                                                           |
|                          | Turn off time*                   | Typical | T <sub>off</sub>  | 0.15 ms                                  | 0.19 ms | 0.08 ms | 0.08 ms | I <sub>F</sub> = 5 mA or 10 mA<br>I <sub>L</sub> = 100 mA<br>V <sub>L</sub> = 10 V     |                                                                           |
|                          |                                  | Maximum |                   | 3.0 ms                                   |         |         |         |                                                                                        |                                                                           |
|                          | I/O capacitance                  | Typical | C <sub>iso</sub>  | 0.8 pF                                   |         |         |         | f = 1 MHz<br>V <sub>B</sub> = 0 V                                                      |                                                                           |
|                          |                                  | Maximum |                   | 1.5 pF                                   |         |         |         |                                                                                        |                                                                           |
|                          | Initial I/O isolation resistance | Minimum | R <sub>iso</sub>  | 1,000 MΩ                                 |         |         |         | 500 V DC                                                                               |                                                                           |
|                          | Max. operating frequency         | Maximum | -                 | 0.5 cps                                  |         |         |         | I <sub>F</sub> = 10 mA<br>duty = 50%<br>I <sub>L</sub> = Max.<br>V <sub>L</sub> = Max. |                                                                           |

\*Turn on/Turn off time



# **■ Recommended operating conditions (Ambient temperature: 25°C)**

Please use under recommended operating conditions to obtain expected characteristics.

| Item        |                              | Symbol | Min. | Max. | Unit |
|-------------|------------------------------|--------|------|------|------|
| LED current |                              | $I_F$  | 5    | 30   | mA   |
| AQZ102      | Load voltage (DC)            | $V_L$  | -    | 48   | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 4.0  | A    |
| AQZ105      | Load voltage (DC)            | $V_L$  | -    | 80   | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 2.6  | A    |
| AQZ107      | Load voltage (DC)            | $V_L$  | -    | 160  | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 1.3  | A    |
| AQZ104      | Load voltage (DC)            | $V_L$  | -    | 320  | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 0.7  | A    |

## AC/DC type

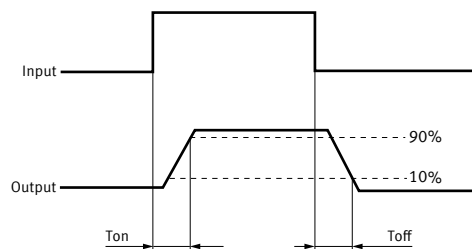
### Absolute maximum ratings (Ambient temperature: 25°C)

| Item                            |                         | Symbol     | AQZ202        | AQZ205 | AQZ207 | AQZ204 | Remarks                                     |
|---------------------------------|-------------------------|------------|---------------|--------|--------|--------|---------------------------------------------|
| Input                           | LED forward current     | $I_F$      | 50 mA         |        |        |        |                                             |
|                                 | LED reverse voltage     | $V_R$      | 5 V           |        |        |        |                                             |
|                                 | Peak forward current    | $I_{FP}$   | 1 A           |        |        |        | $f = 100 \text{ Hz}$ ,<br>Duty Ratio = 0.1% |
|                                 | Power dissipation       | $P_{in}$   | 75 mW         |        |        |        |                                             |
| Output                          | Load voltage (peak AC)  | $V_L$      | 60 V          | 100 V  | 200 V  | 400 V  |                                             |
|                                 | Continuous load current | $I_L$      | 3.0 A         | 2.0 A  | 1.0 A  | 0.5 A  | Peak AC, DC                                 |
|                                 | Peak load current       | $I_{peak}$ | 9.0 A         | 6.0 A  | 3.0 A  | 1.5 A  | 100 ms (1 shot),<br>$V_L = \text{DC}$       |
|                                 | Power dissipation       | $P_{out}$  | 1.6 W         |        |        |        |                                             |
| Total power dissipation         |                         | $P_T$      | 1.6 W         |        |        |        |                                             |
| I/O isolation voltage           |                         | $V_{iso}$  | 2,500 Vrms    |        |        |        |                                             |
| Ambient temperature (Operating) |                         | $T_{opr}$  | -40 to +85°C  |        |        |        | (Avoid icing and condensation)              |
| Ambient temperature (Storage)   |                         | $T_{stg}$  | -40 to +100°C |        |        |        |                                             |

### Electrical characteristics (Ambient temperature: 25°C)

| Item                     |                                  |         | Symbol     | AQZ202                                    | AQZ205        | AQZ207       | AQZ204       | Condition                                                                         |
|--------------------------|----------------------------------|---------|------------|-------------------------------------------|---------------|--------------|--------------|-----------------------------------------------------------------------------------|
| Input                    | LED operate current              | Typical | $I_{Fon}$  | 1.0 mA                                    |               |              |              | $I_L = 100 \text{ mA}$                                                            |
|                          |                                  | Maximum |            | 3.0 mA                                    |               |              |              | $V_L = 10 \text{ V}$                                                              |
|                          | LED turn off current             | Minimum | $I_{Foff}$ | 0.4 mA                                    |               |              |              | $I_L = 100 \text{ mA}$                                                            |
|                          |                                  | Typical |            | 0.9 mA                                    |               |              |              | $V_L = 10 \text{ V}$                                                              |
|                          | LED dropout voltage              | Typical | $V_F$      | 1.25 V (1.16 V at $I_F = 10 \text{ mA}$ ) |               |              |              | $I_F = 50 \text{ mA}$                                                             |
|                          |                                  | Maximum |            | 1.5 V                                     |               |              |              |                                                                                   |
| Output                   | On resistance                    | Typical | $R_{on}$   | 0.11 $\Omega$                             | 0.23 $\Omega$ | 0.7 $\Omega$ | 2.1 $\Omega$ | $I_F = 10 \text{ mA}$                                                             |
|                          |                                  | Maximum |            | 0.18 $\Omega$                             | 0.34 $\Omega$ | 1.1 $\Omega$ | 3.2 $\Omega$ | $I_L = \text{Max.}$<br>Within 1 s                                                 |
|                          | Off state leakage current        | Maximum | $I_{Leak}$ | 10 $\mu\text{A}$                          |               |              |              | $I_F = 0 \text{ mA}$<br>$V_L = \text{Max.}$                                       |
| Transfer characteristics | Turn on time*                    | Typical | $T_{on}$   | 2.46 ms                                   | 2.40 ms       | 1.12 ms      | 1.65 ms      | $I_F = 10 \text{ mA}$                                                             |
|                          |                                  | Maximum |            | 5.0 ms                                    |               |              |              | $I_L = 100 \text{ mA}$                                                            |
|                          |                                  | Typical |            | 5.64 ms                                   | 5.65 ms       | 2.57 ms      | 3.88 ms      | $V_L = 10 \text{ V}$                                                              |
|                          |                                  | Maximum |            | 10.0 ms                                   |               |              |              | $I_F = 5 \text{ mA}$<br>$I_L = 100 \text{ mA}$<br>$V_L = 10 \text{ V}$            |
|                          | Turn off time*                   | Typical | $T_{off}$  | 0.22 ms                                   | 0.21 ms       | 0.10 ms      | 0.08 ms      | $I_F = 5 \text{ mA or } 10 \text{ mA}$                                            |
|                          |                                  | Maximum |            | 3.0 ms                                    |               |              |              | $I_L = 100 \text{ mA}$<br>$V_L = 10 \text{ V}$                                    |
|                          | I/O capacitance                  | Typical | $C_{iso}$  | 0.8 pF                                    |               |              |              | $f = 1 \text{ MHz}$                                                               |
|                          |                                  | Maximum |            | 1.5 pF                                    |               |              |              | $V_b = 0 \text{ V}$                                                               |
|                          | Initial I/O isolation resistance | Minimum | $R_{iso}$  | 1,000 M $\Omega$                          |               |              |              | 500 V DC                                                                          |
|                          | Max. operating frequency         | Maximum | -          | 0.5 cps                                   |               |              |              | $I_F = 10 \text{ mA}$<br>duty = 50%<br>$I_L = \text{Max.}$<br>$V_L = \text{Max.}$ |

\*Turn on/Turn off time



**■ Recommended operating conditions (Ambient temperature: 25°C)**

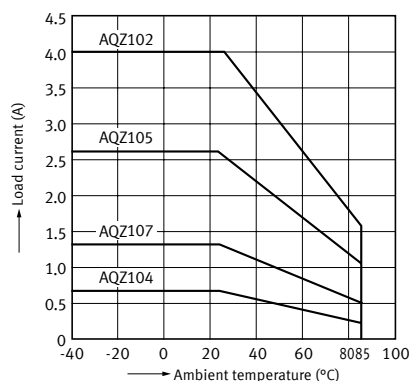
Please use under recommended operating conditions to obtain expected characteristics.

| Item        |                         | Symbol | Min. | Max. | Unit |
|-------------|-------------------------|--------|------|------|------|
| LED current |                         | $I_F$  | 5    | 30   | mA   |
| AQZ202      | Load voltage (Peak AC)  | $V_L$  | -    | 48   | V    |
|             | Continuous load current | $I_L$  | -    | 3.0  | A    |
| AQZ205      | Load voltage (Peak AC)  | $V_L$  | -    | 80   | V    |
|             | Continuous load current | $I_L$  | -    | 2.0  | A    |
| AQZ207      | Load voltage (Peak AC)  | $V_L$  | -    | 160  | V    |
|             | Continuous load current | $I_L$  | -    | 1.0  | A    |
| AQZ204      | Load voltage (Peak AC)  | $V_L$  | -    | 320  | V    |
|             | Continuous load current | $I_L$  | -    | 0.5  | A    |

## REFERENCE DATA

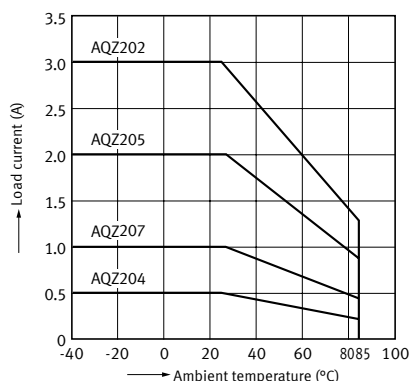
### 1-1. Load current vs. ambient temperature characteristics (DC type)

Allowable ambient temperature: -40 to +85°C



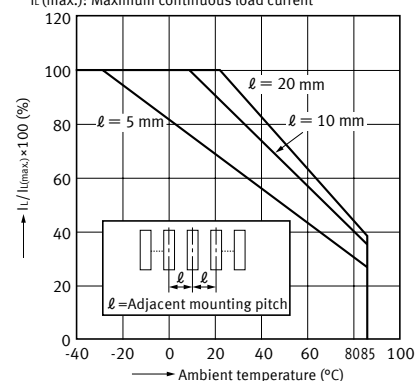
### 1-2. Load current vs. ambient temperature characteristics (AC/DC type)

Allowable ambient temperature: -40 to +85°C



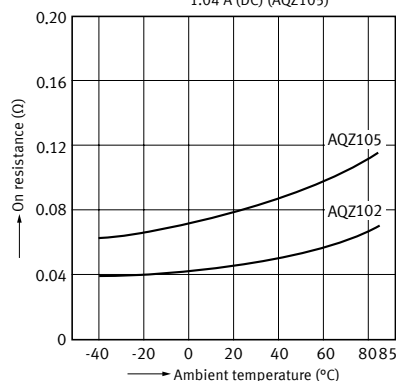
### 2. Load current vs. ambient temperature characteristics in adjacent mounting

$I_L$ : Load current;  
 $I_L(\text{max.})$ : Maximum continuous load current



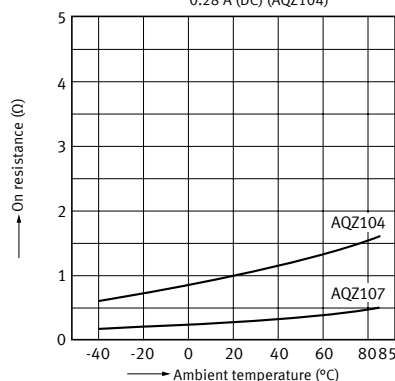
### 3-1. On resistance vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 1.6 A (DC) (AQZ102),  
1.04 A (DC) (AQZ105)



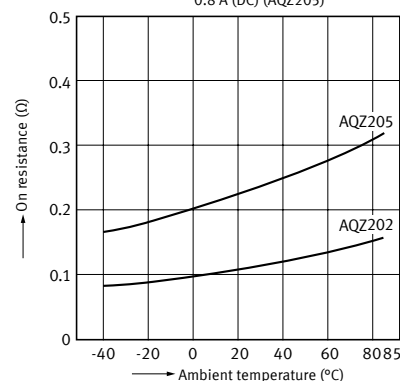
### 3-2. On resistance vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 0.52 A (DC) (AQZ107),  
0.28 A (DC) (AQZ104)



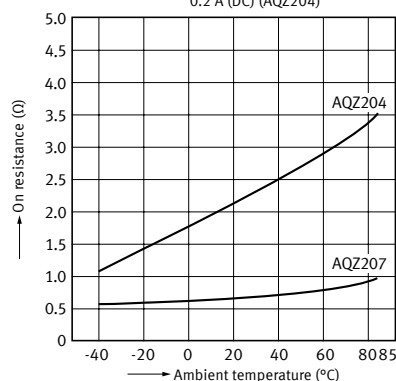
### 3-3. On resistance vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 1.2 A (DC) (AQZ202),  
0.8 A (DC) (AQZ205)



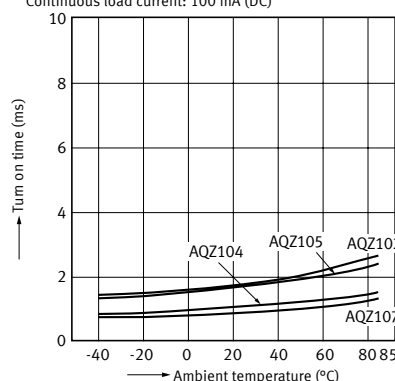
### 3-4. On resistance vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 0.4 A (DC) (AQZ207),  
0.2 A (DC) (AQZ204)



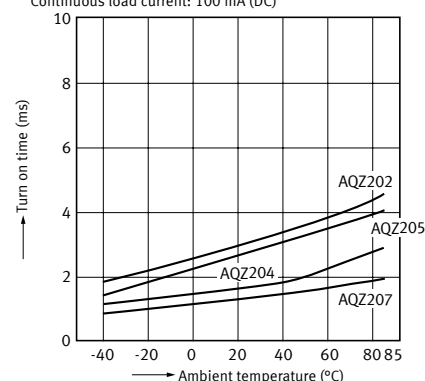
### 4-1. Turn on time vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



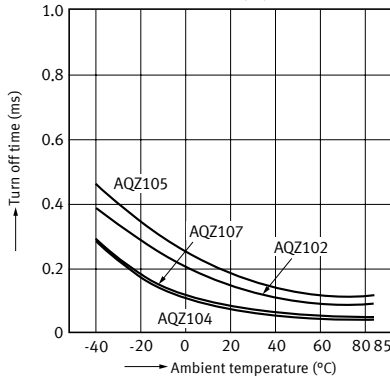
### 4-2. Turn on time vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



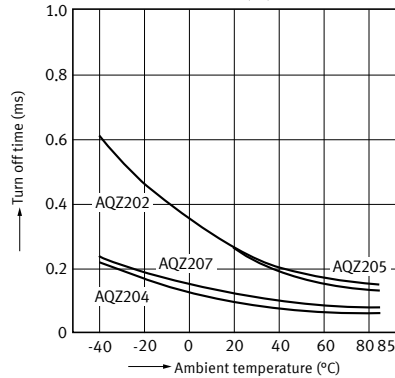
### 5-1. Turn off time vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



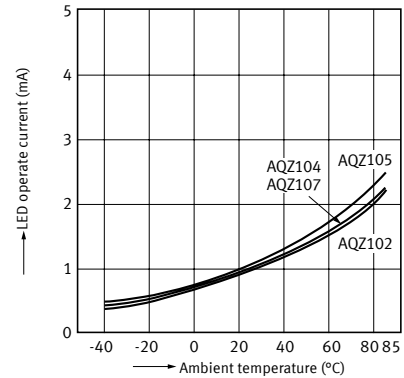
### 5-2. Turn off time vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



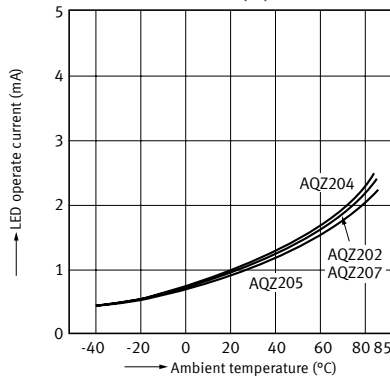
### 6-1. LED operate current vs. ambient temperature characteristics (DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



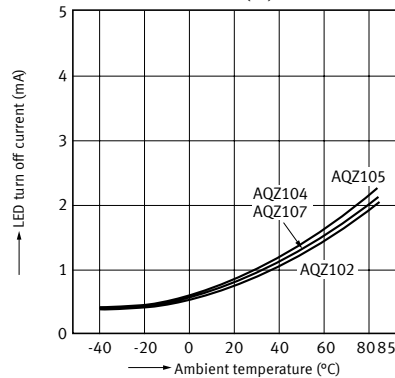
### 6-2. LED operate current vs. ambient temperature characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



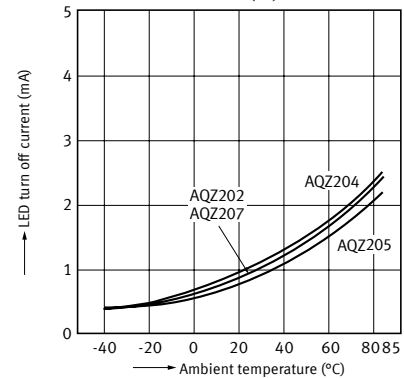
### 7-1. LED turn off current vs. ambient temperature characteristics (DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



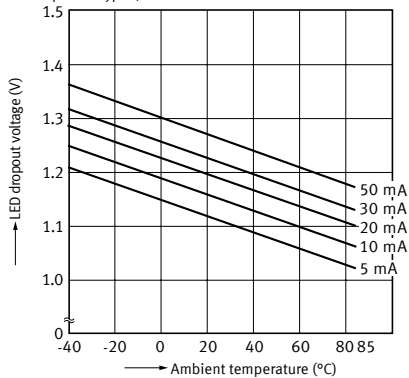
### 7-2. LED turn off current vs. ambient temperature characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



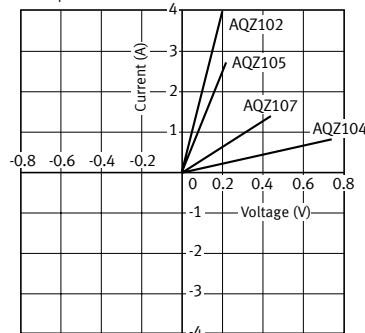
### 8. LED dropout voltage vs. ambient temperature characteristics

Sample: all types; LED current: 5 to 50 mA



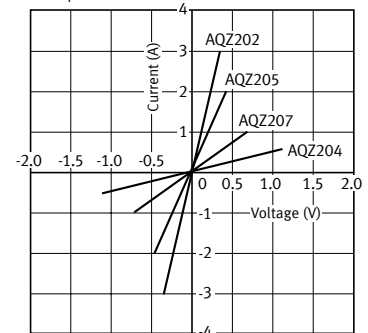
### 9-1. Current vs. voltage characteristics of output at MOS portion (DC type)

Ambient temperature: 25°C



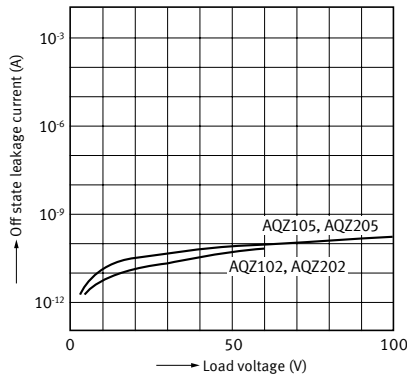
### 9-2. Current vs. voltage characteristics of output at MOS portion (AC/DC type)

Ambient temperature: 25°C



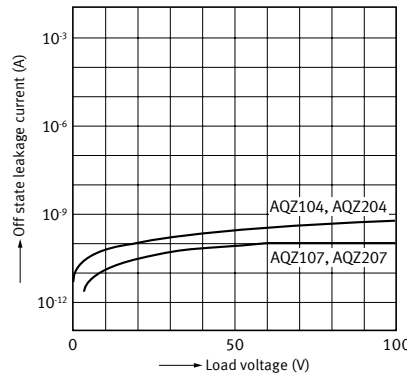
## 10-1. Off state leakage current vs. load voltage characteristics

Ambient temperature: 25°C



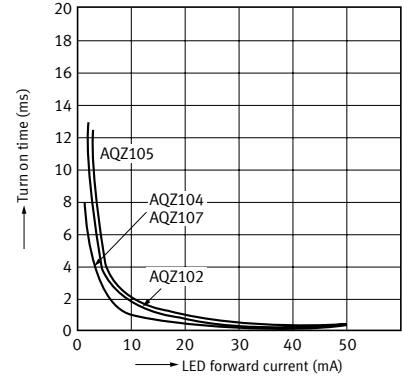
## 10-2. Off state leakage current vs. load voltage characteristics

Ambient temperature: 25°C



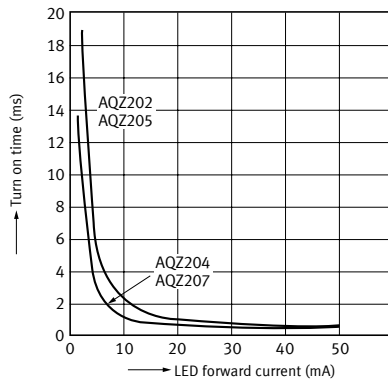
## 11-1. Turn on time vs. LED forward current characteristics (DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



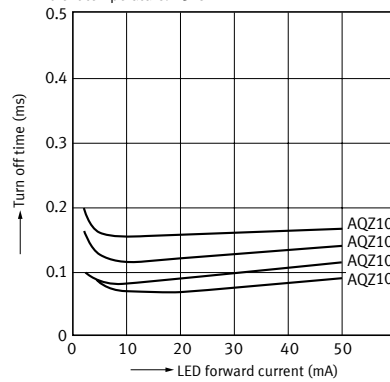
## 11-2. Turn on time vs. LED forward current characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



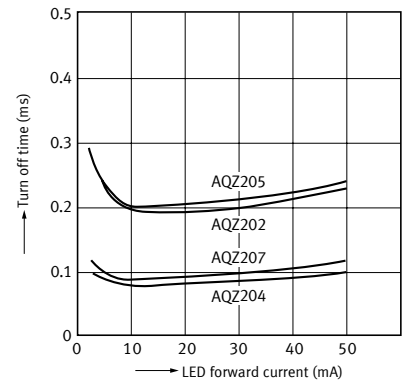
## 12-1. Turn off time vs. LED forward current characteristics (DC type)

Measured portion: between terminals 4 and 6;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



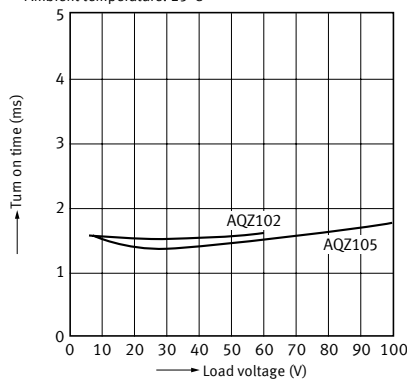
## 12-2. Turn off time vs. LED forward current characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



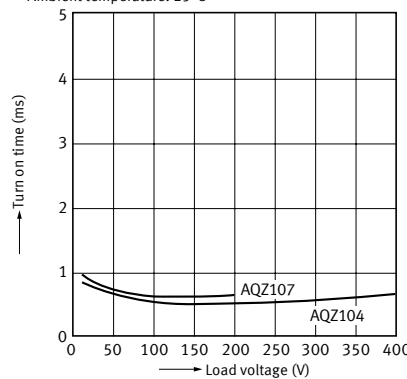
## 13-1. Turn on time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



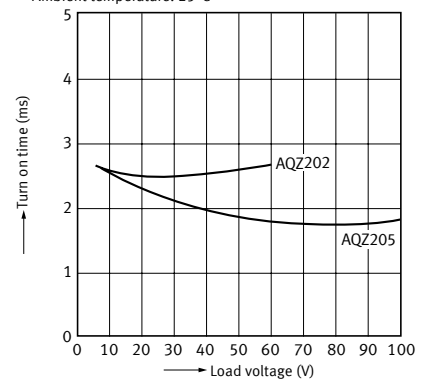
## 13-2. Turn on time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



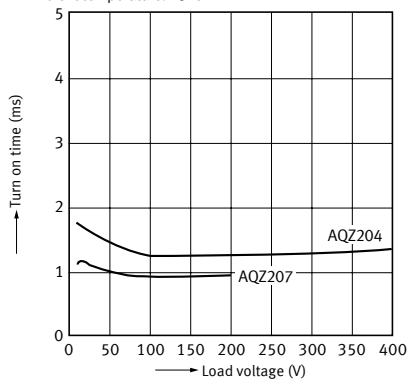
## 13-3. Turn on time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



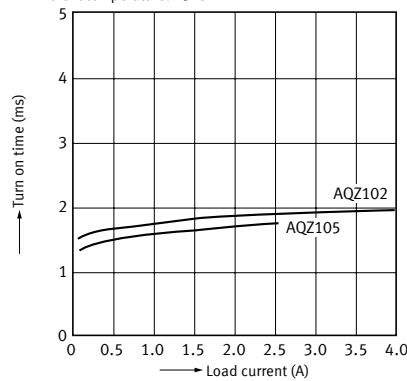
### 13-4. Turn on time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



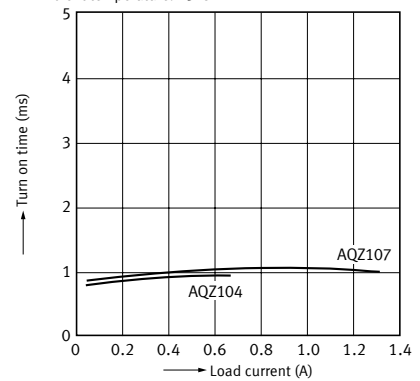
### 14-1. Turn on time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



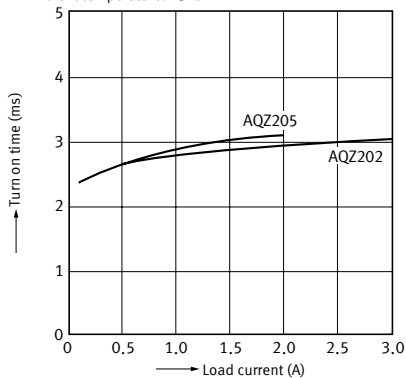
### 14-2. Turn on time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



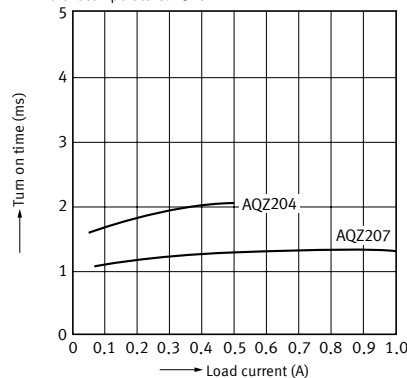
### 14-3. Turn on time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



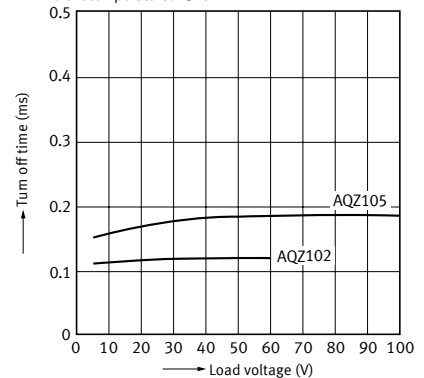
### 14-4. Turn on time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



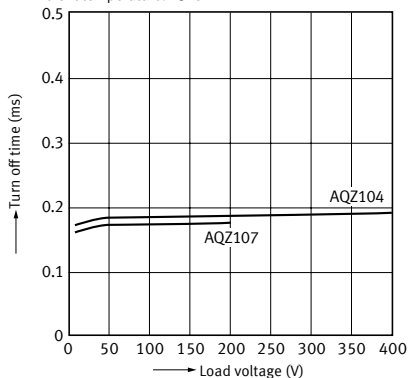
### 15-1. Turn off time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



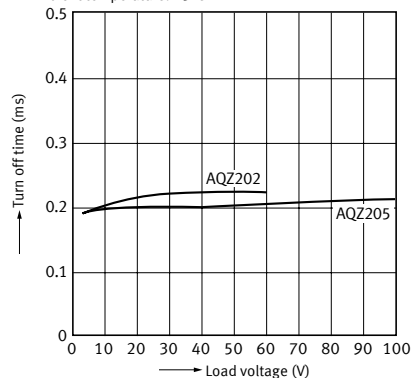
### 15-2. Turn off time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



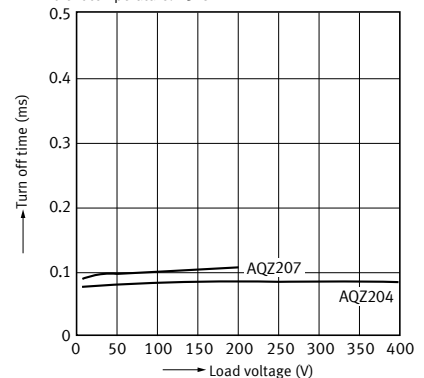
### 15-3. Turn off time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



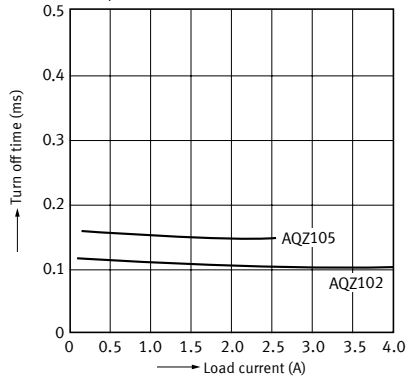
### 15-4. Turn off time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



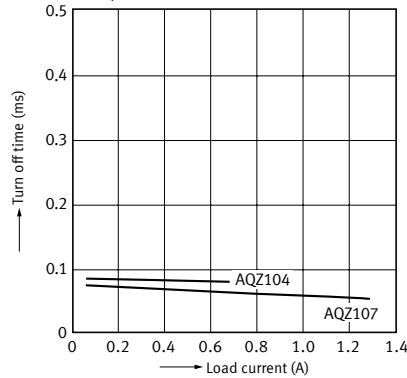
16-1. Turn off time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



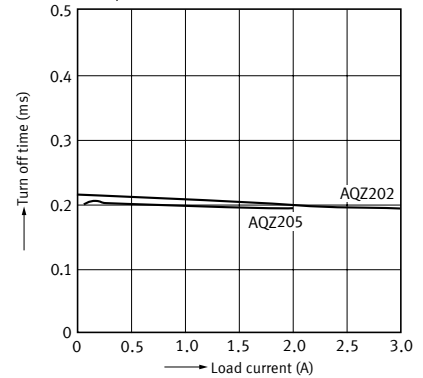
16-2. Turn off time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



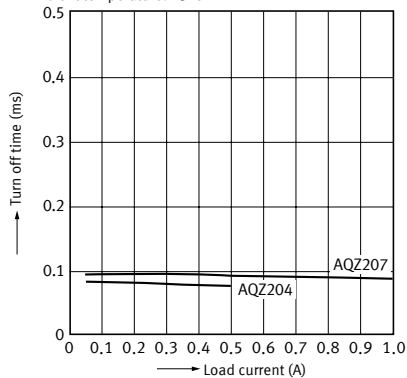
16-3. Turn off time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



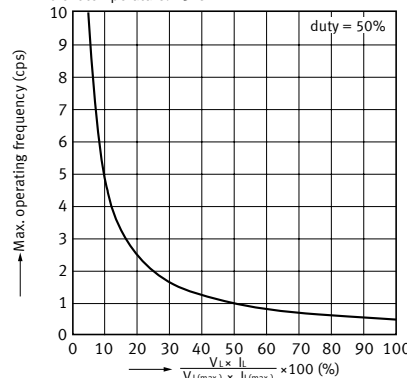
16-4. Turn off time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



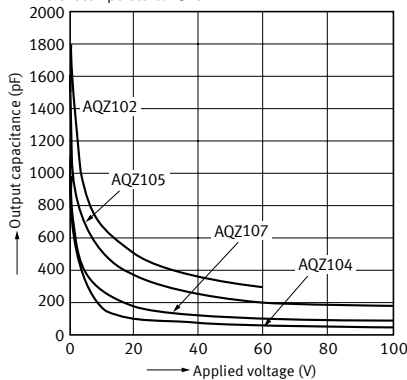
17. Max. operating frequency vs. load voltage and load current characteristics

Sample: All types;  
LED current: 10 mA;  
Ambient temperature: 25°C



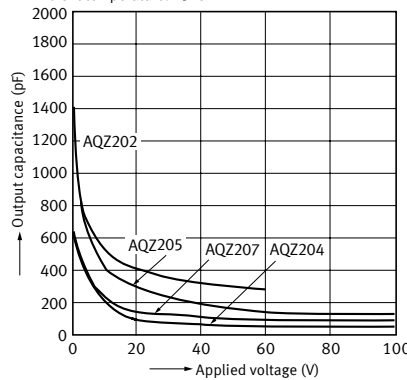
18-1. Output capacitance vs. applied voltage characteristics (DC type)

Frequency: 1 MHz;  
Ambient temperature: 25°C



18-2. Output capacitance vs. applied voltage characteristics (AC/DC type)

Frequency: 1 MHz;  
Ambient temperature: 25°C

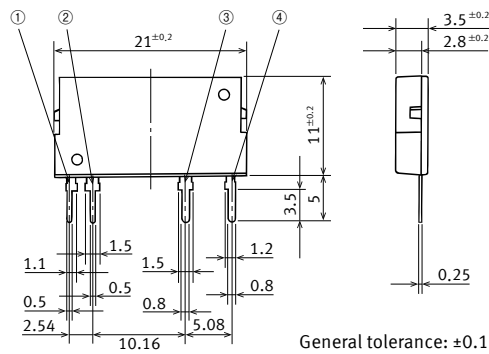
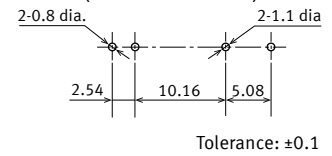


**DIMENSIONS****CAD** The CAD data of the products with a "CAD" mark can be downloaded from our Website.

Unit: mm

**CAD****External dimensions**

- AC/DC type  
 ① Input: DC-  
 ② Input: DC+  
 ③ Output: DC or AC  
 ④ Output: DC or AC
- DC type  
 ① Input: DC-  
 ② Input: DC+  
 ③ Output: DC-  
 ④ Output: DC+

**PC board pattern (BOTTOM VIEW)****SCHEMATIC AND WIRING DIAGRAMS**

| Schematic | Output configuration | Load type | Connection | Wiring diagram |
|-----------|----------------------|-----------|------------|----------------|
|           | 1 Form A             | DC        | -          |                |
|           |                      | AC/DC     | -          |                |

**SAFETY STANDARDS**

| Part No.       |        | UL (Recognized)         |                                     | CSA (Certified)         |                | Remarks                     |
|----------------|--------|-------------------------|-------------------------------------|-------------------------|----------------|-----------------------------|
|                |        | File No. (Standard No.) | Contact rating                      | File No. (Standard No.) | Contact rating |                             |
| DC only        | AQZ102 | E191218 (UL1577)        | 4.0A 60V DC                         | (Certified by C-UL)     |                | VDE approved (Nr. 40051981) |
|                | AQZ105 |                         | 2.6A 100V DC                        |                         |                |                             |
|                | AQZ107 |                         | 1.3A 200V DC                        |                         |                |                             |
|                | AQZ104 |                         | 0.7A 400V DC                        |                         |                |                             |
| AC/DC dual use | AQZ202 |                         | 3.0A 60V AC (peak)<br>3.0A 60V DC   |                         |                |                             |
|                | AQZ205 |                         | 2.0A 100V AC (peak)<br>2.0A 100V DC |                         |                |                             |
|                | AQZ207 |                         | 1.0A 200V AC (peak)<br>1.0A 200V DC |                         |                |                             |
|                | AQZ204 |                         | 0.5A 400V AC (peak)<br>0.5A 400V DC |                         |                |                             |

Note: For the latest information on compliance with safety standards, please refer to our website.

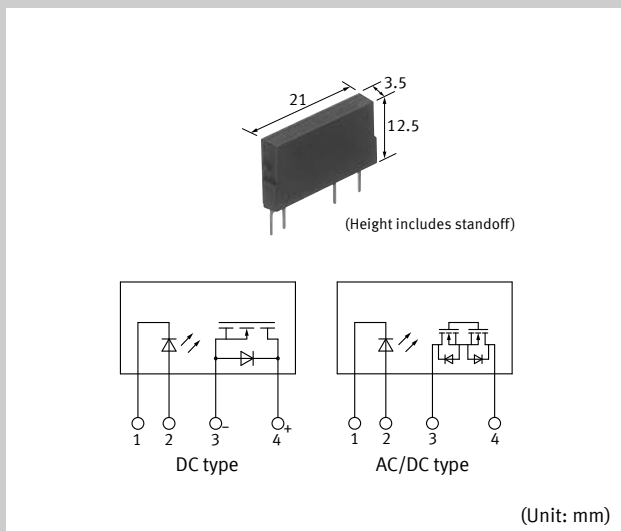
Please refer to **"the latest product specifications"** when designing your product.

•Requests to customers:

<https://industrial.panasonic.com/ac/e/salespolicies/>

## Power 1 Form A

**Slim type with high capacity up to 4A DC load type also available**



### FEATURES

- Slim SIL4-pin package
- Extremely low on-resistance
- Control low-level signal
- Low-level off state leakage current of max. 10  $\mu$ A
- High I/O isolation voltage of 2,500 V
- Eliminates the need for a counter electromotive protection diode in the drive circuit on the input side
- Eliminates the need for a power supply to drive the power MOSFET
- No restriction on mounting direction
- Low thermoelectromotive force
- Neither noise nor arc at contact
- Sockets are also available

### TYPICAL APPLICATIONS

- Traffic signals
- Measuring instruments
- Industrial machines

Note: Please contact our sales representative for automotive applications of PhotoMOS.

### TYPES

| Category       | Output rating* |              | Part No. | Packing quantity      |              |
|----------------|----------------|--------------|----------|-----------------------|--------------|
|                | Load voltage   | Load current |          | Inner carton (1-tube) | Outer carton |
| DC only        | 60 V           | 4.0 A        | AQZ102   | 25 pcs.               | 500 pcs.     |
|                | 100 V          | 2.6 A        | AQZ105   |                       |              |
|                | 200 V          | 1.3 A        | AQZ107   |                       |              |
|                | 400 V          | 0.7 A        | AQZ104   |                       |              |
| AC/DC dual use | 60 V           | 3.0 A        | AQZ202   |                       |              |
|                | 100 V          | 2.0 A        | AQZ205   |                       |              |
|                | 200 V          | 1.0 A        | AQZ207   |                       |              |
|                | 400 V          | 0.5 A        | AQZ204   |                       |              |

Note: Please refer to the "Cautions for use" regarding the recommended operation load voltage.

\*Load voltage and current of AC/DC type: Peak AC/DC. Load voltage and current of DC type: DC.

## RATING

## DC type

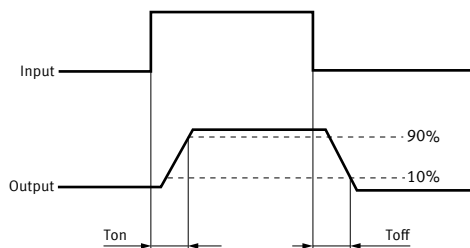
## ■ Absolute maximum ratings (Ambient temperature: 25°C)

| Item                            |                              | Symbol     | AQZ102        | AQZ105 | AQZ107 | AQZ104 | Remarks                                     |
|---------------------------------|------------------------------|------------|---------------|--------|--------|--------|---------------------------------------------|
| Input                           | LED forward current          | $I_F$      | 50 mA         |        |        |        |                                             |
|                                 | LED reverse voltage          | $V_R$      | 5 V           |        |        |        |                                             |
|                                 | Peak forward current         | $I_{FP}$   | 1 A           |        |        |        | $f = 100 \text{ Hz}$ ,<br>Duty Ratio = 0.1% |
|                                 | Power dissipation            | $P_{in}$   | 75 mW         |        |        |        |                                             |
| Output                          | Load voltage (DC)            | $V_L$      | 60 V          | 100 V  | 200 V  | 400 V  |                                             |
|                                 | Continuous load current (DC) | $I_L$      | 4.0 A         | 2.6 A  | 1.3 A  | 0.7 A  |                                             |
|                                 | Peak load current            | $I_{peak}$ | 9.0 A         | 6.0 A  | 3.0 A  | 1.5 A  | 100 ms (1 shot),<br>$V_L = \text{DC}$       |
|                                 | Power dissipation            | $P_{out}$  | 1.35 W        |        |        |        |                                             |
| Total power dissipation         |                              | $P_T$      | 1.35 W        |        |        |        |                                             |
| I/O isolation voltage           |                              | $V_{iso}$  | 2,500 Vrms    |        |        |        |                                             |
| Ambient temperature (Operating) |                              | $T_{opr}$  | -40 to +85°C  |        |        |        | (Avoid icing and condensation)              |
| Ambient temperature (Storage)   |                              | $T_{stg}$  | -40 to +100°C |        |        |        |                                             |

## ■ Electrical characteristics (Ambient temperature: 25°C)

| Item                     |                                  |         | Symbol            | AQZ102                                   | AQZ105  | AQZ107  | AQZ104  | Condition                                                                              |                                                                           |
|--------------------------|----------------------------------|---------|-------------------|------------------------------------------|---------|---------|---------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Input                    | LED operate current              | Typical | I <sub>Fon</sub>  | 1.0 mA                                   |         |         |         | I <sub>L</sub> = 100 mA                                                                |                                                                           |
|                          |                                  | Maximum |                   | 3.0 mA                                   |         |         |         | V <sub>L</sub> = 10 V                                                                  |                                                                           |
|                          | LED turn off current             | Minimum | I <sub>Foff</sub> | 0.4 mA                                   |         |         |         | I <sub>L</sub> = 100 mA                                                                |                                                                           |
|                          |                                  | Typical |                   | 0.9 mA                                   |         |         |         | V <sub>L</sub> = 10 V                                                                  |                                                                           |
|                          | LED dropout voltage              | Typical | V <sub>F</sub>    | 1.25 V(1.16 V at I <sub>F</sub> = 10 mA) |         |         |         | I <sub>F</sub> = 50 mA                                                                 |                                                                           |
|                          |                                  | Maximum |                   | 1.5 V                                    |         |         |         |                                                                                        |                                                                           |
| Output                   | On resistance                    | Typical | R <sub>on</sub>   | 0.05 Ω                                   | 0.081 Ω | 0.34 Ω  | 1.06 Ω  | I <sub>F</sub> = 10 mA<br>I <sub>L</sub> = Max.<br>Within 1 s                          |                                                                           |
|                          |                                  | Maximum |                   | 0.09 Ω                                   | 0.17 Ω  | 0.55 Ω  | 1.6 Ω   |                                                                                        |                                                                           |
|                          | Off state leakage current        | Maximum | I <sub>Leak</sub> | 10 μA                                    |         |         |         | I <sub>F</sub> = 0 mA<br>V <sub>L</sub> = Max.                                         |                                                                           |
| Transfer characteristics | Turn on time*                    | Typical | T <sub>on</sub>   | 1.66 ms                                  | 1.89 ms | 0.83 ms | 1.01 ms | I <sub>F</sub> = 10 mA<br>I <sub>L</sub> = 100 mA<br>V <sub>L</sub> = 10 V             |                                                                           |
|                          |                                  | Maximum |                   | 5.0 ms                                   |         |         |         |                                                                                        |                                                                           |
|                          |                                  | Typical |                   | 3.79 ms                                  | 4.50 ms | 1.75 ms | 2.34 ms |                                                                                        | I <sub>F</sub> = 5 mA<br>I <sub>L</sub> = 100 mA<br>V <sub>L</sub> = 10 V |
|                          |                                  | Maximum |                   | 10.0 ms                                  |         |         |         |                                                                                        |                                                                           |
|                          | Turn off time*                   | Typical | T <sub>off</sub>  | 0.15 ms                                  | 0.19 ms | 0.08 ms | 0.08 ms | I <sub>F</sub> = 5 mA or 10 mA<br>I <sub>L</sub> = 100 mA<br>V <sub>L</sub> = 10 V     |                                                                           |
|                          |                                  | Maximum |                   | 3.0 ms                                   |         |         |         |                                                                                        |                                                                           |
|                          | I/O capacitance                  | Typical | C <sub>iso</sub>  | 0.8 pF                                   |         |         |         | f = 1 MHz<br>V <sub>B</sub> = 0 V                                                      |                                                                           |
|                          |                                  | Maximum |                   | 1.5 pF                                   |         |         |         |                                                                                        |                                                                           |
|                          | Initial I/O isolation resistance | Minimum | R <sub>iso</sub>  | 1,000 MΩ                                 |         |         |         | 500 V DC                                                                               |                                                                           |
|                          | Max. operating frequency         | Maximum | -                 | 0.5 cps                                  |         |         |         | I <sub>F</sub> = 10 mA<br>duty = 50%<br>I <sub>L</sub> = Max.<br>V <sub>L</sub> = Max. |                                                                           |

\*Turn on/Turn off time



**■ Recommended operating conditions (Ambient temperature: 25°C)**

Please use under recommended operating conditions to obtain expected characteristics.

| Item        |                              | Symbol | Min. | Max. | Unit |
|-------------|------------------------------|--------|------|------|------|
| LED current |                              | $I_F$  | 5    | 30   | mA   |
| AQZ102      | Load voltage (DC)            | $V_L$  | -    | 48   | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 4.0  | A    |
| AQZ105      | Load voltage (DC)            | $V_L$  | -    | 80   | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 2.6  | A    |
| AQZ107      | Load voltage (DC)            | $V_L$  | -    | 160  | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 1.3  | A    |
| AQZ104      | Load voltage (DC)            | $V_L$  | -    | 320  | V    |
|             | Continuous load current (DC) | $I_L$  | -    | 0.7  | A    |

## AC/DC type

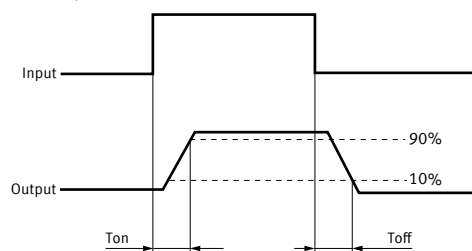
### Absolute maximum ratings (Ambient temperature: 25°C)

| Item                            |                         | Symbol     | AQZ202        | AQZ205 | AQZ207 | AQZ204 | Remarks                                     |
|---------------------------------|-------------------------|------------|---------------|--------|--------|--------|---------------------------------------------|
| Input                           | LED forward current     | $I_F$      | 50 mA         |        |        |        |                                             |
|                                 | LED reverse voltage     | $V_R$      | 5 V           |        |        |        |                                             |
|                                 | Peak forward current    | $I_{FP}$   | 1 A           |        |        |        | $f = 100 \text{ Hz}$ ,<br>Duty Ratio = 0.1% |
|                                 | Power dissipation       | $P_{in}$   | 75 mW         |        |        |        |                                             |
| Output                          | Load voltage (peak AC)  | $V_L$      | 60 V          | 100 V  | 200 V  | 400 V  |                                             |
|                                 | Continuous load current | $I_L$      | 3.0 A         | 2.0 A  | 1.0 A  | 0.5 A  | Peak AC, DC                                 |
|                                 | Peak load current       | $I_{peak}$ | 9.0 A         | 6.0 A  | 3.0 A  | 1.5 A  | 100 ms (1 shot),<br>$V_L = \text{DC}$       |
|                                 | Power dissipation       | $P_{out}$  | 1.6 W         |        |        |        |                                             |
| Total power dissipation         |                         | $P_T$      | 1.6 W         |        |        |        |                                             |
| I/O isolation voltage           |                         | $V_{iso}$  | 2,500 Vrms    |        |        |        |                                             |
| Ambient temperature (Operating) |                         | $T_{opr}$  | -40 to +85°C  |        |        |        | (Avoid icing and condensation)              |
| Ambient temperature (Storage)   |                         | $T_{stg}$  | -40 to +100°C |        |        |        |                                             |

### Electrical characteristics (Ambient temperature: 25°C)

| Item                     |                                  |         | Symbol            | AQZ202                                    | AQZ205  | AQZ207  | AQZ204  | Condition                                                                              |
|--------------------------|----------------------------------|---------|-------------------|-------------------------------------------|---------|---------|---------|----------------------------------------------------------------------------------------|
| Input                    | LED operate current              | Typical | I <sub>Fon</sub>  | 1.0 mA                                    |         |         |         | I <sub>L</sub> = 100 mA                                                                |
|                          |                                  | Maximum |                   | 3.0 mA                                    |         |         |         | V <sub>L</sub> = 10 V                                                                  |
|                          | LED turn off current             | Minimum | I <sub>Foff</sub> | 0.4 mA                                    |         |         |         | I <sub>L</sub> = 100 mA                                                                |
|                          |                                  | Typical |                   | 0.9 mA                                    |         |         |         | V <sub>L</sub> = 10 V                                                                  |
|                          | LED dropout voltage              | Typical | V <sub>F</sub>    | 1.25 V (1.16 V at I <sub>F</sub> = 10 mA) |         |         |         | I <sub>F</sub> = 50 mA                                                                 |
|                          |                                  | Maximum |                   | 1.5 V                                     |         |         |         |                                                                                        |
| Output                   | On resistance                    | Typical | R <sub>on</sub>   | 0.11 Ω                                    | 0.23 Ω  | 0.7 Ω   | 2.1 Ω   | I <sub>F</sub> = 10 mA                                                                 |
|                          |                                  | Maximum |                   | 0.18 Ω                                    | 0.34 Ω  | 1.1 Ω   | 3.2 Ω   | I <sub>L</sub> = Max.<br>Within 1 s                                                    |
|                          | Off state leakage current        | Maximum | I <sub>Leak</sub> | 10 μA                                     |         |         |         | I <sub>F</sub> = 0 mA<br>V <sub>L</sub> = Max.                                         |
| Transfer characteristics | Turn on time*                    | Typical | T <sub>on</sub>   | 2.46 ms                                   | 2.40 ms | 1.12 ms | 1.65 ms | I <sub>F</sub> = 10 mA                                                                 |
|                          |                                  | Maximum |                   | 5.0 ms                                    |         |         |         | I <sub>L</sub> = 100 mA                                                                |
|                          |                                  | Typical |                   | 5.64 ms                                   | 5.65 ms | 2.57 ms | 3.88 ms | V <sub>L</sub> = 10 V                                                                  |
|                          |                                  | Maximum |                   | 10.0 ms                                   |         |         |         | I <sub>F</sub> = 5 mA                                                                  |
|                          | Turn off time*                   | Typical | T <sub>off</sub>  | 0.22 ms                                   | 0.21 ms | 0.10 ms | 0.08 ms | I <sub>L</sub> = 100 mA                                                                |
|                          |                                  | Maximum |                   | 3.0 ms                                    |         |         |         | V <sub>L</sub> = 10 V                                                                  |
|                          | I/O capacitance                  | Typical | C <sub>iso</sub>  | 0.8 pF                                    |         |         |         | f = 1 MHz                                                                              |
|                          |                                  | Maximum |                   | 1.5 pF                                    |         |         |         | V <sub>B</sub> = 0 V                                                                   |
|                          | Initial I/O isolation resistance | Minimum | R <sub>iso</sub>  | 1,000 MΩ                                  |         |         |         | 500 V DC                                                                               |
|                          | Max. operating frequency         | Maximum | -                 | 0.5 cps                                   |         |         |         | I <sub>F</sub> = 10 mA<br>duty = 50%<br>I <sub>L</sub> = Max.<br>V <sub>L</sub> = Max. |

\*Turn on/Turn off time



# **■ Recommended operating conditions (Ambient temperature: 25°C)**

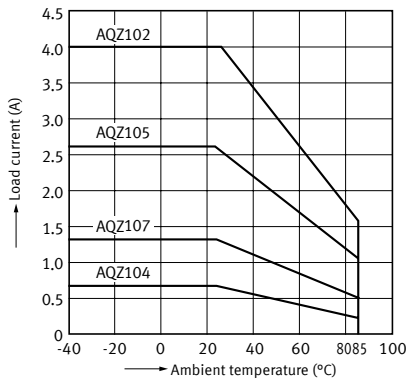
Please use under recommended operating conditions to obtain expected characteristics.

| Item        |                         | Symbol | Min. | Max. | Unit |
|-------------|-------------------------|--------|------|------|------|
| LED current |                         | $I_F$  | 5    | 30   | mA   |
| AQZ202      | Load voltage (Peak AC)  | $V_L$  | -    | 48   | V    |
|             | Continuous load current | $I_L$  | -    | 3.0  | A    |
| AQZ205      | Load voltage (Peak AC)  | $V_L$  | -    | 80   | V    |
|             | Continuous load current | $I_L$  | -    | 2.0  | A    |
| AQZ207      | Load voltage (Peak AC)  | $V_L$  | -    | 160  | V    |
|             | Continuous load current | $I_L$  | -    | 1.0  | A    |
| AQZ204      | Load voltage (Peak AC)  | $V_L$  | -    | 320  | V    |
|             | Continuous load current | $I_L$  | -    | 0.5  | A    |

## REFERENCE DATA

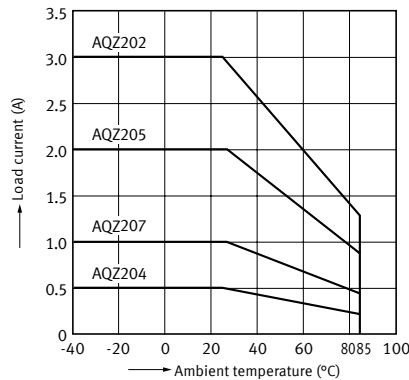
### 1-1. Load current vs. ambient temperature characteristics (DC type)

Allowable ambient temperature: -40 to +85°C



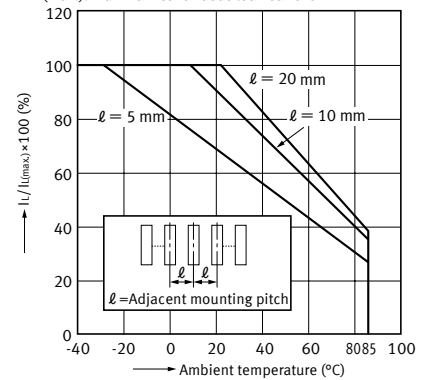
### 1-2. Load current vs. ambient temperature characteristics (AC/DC type)

Allowable ambient temperature: -40 to +85°C



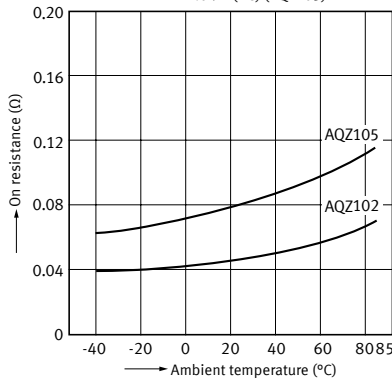
### 2. Load current vs. ambient temperature characteristics in adjacent mounting

$I_L$ : Load current;  
 $I_L(\text{max.})$ : Maximum continuous load current



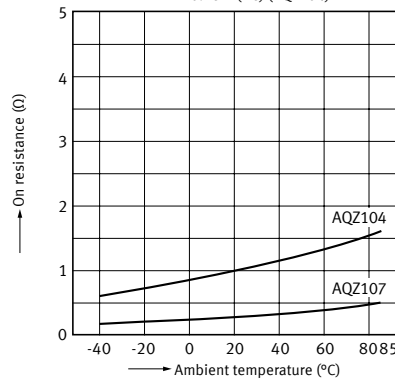
### 3-1. On resistance vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 1.6 A (DC) (AQZ102),  
1.04 A (DC) (AQZ105)



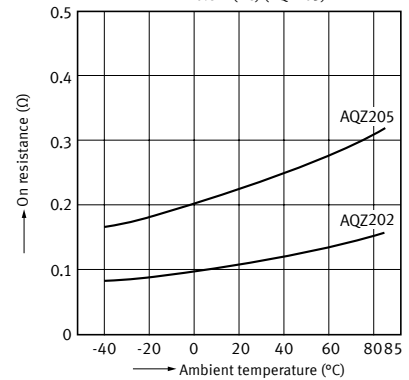
### 3-2. On resistance vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 0.52 A (DC) (AQZ107),  
0.28 A (DC) (AQZ104)



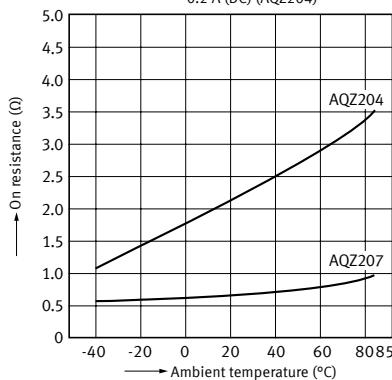
### 3-3. On resistance vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 1.2 A (DC) (AQZ202),  
0.8 A (DC) (AQZ205)



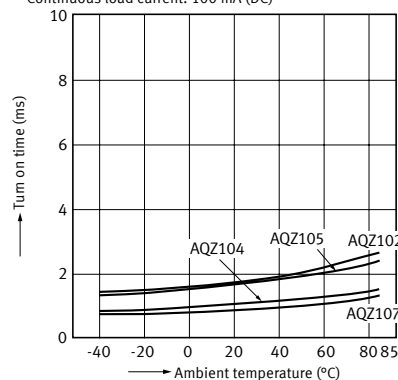
### 3-4. On resistance vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 0.4 A (DC) (AQZ207),  
0.2 A (DC) (AQZ204)



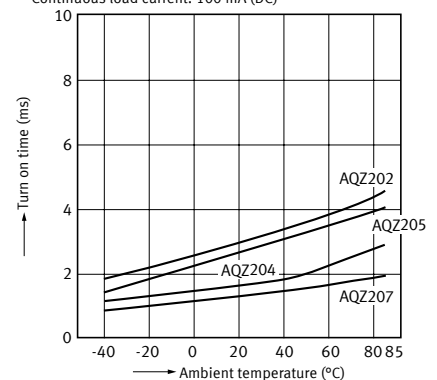
### 4-1. Turn on time vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



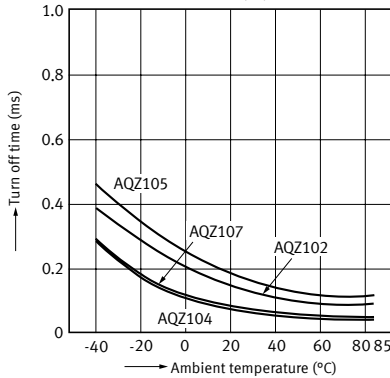
### 4-2. Turn on time vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



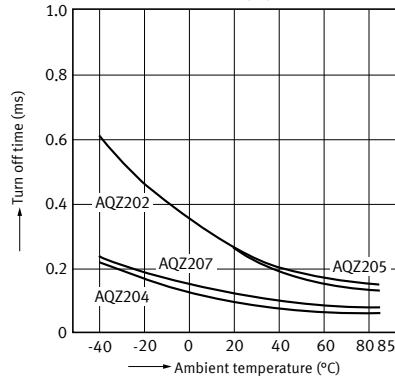
### 5-1. Turn off time vs. ambient temperature characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



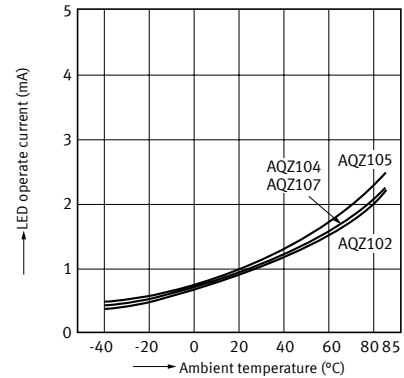
### 5-2. Turn off time vs. ambient temperature characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



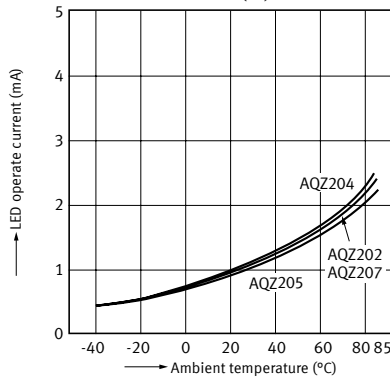
### 6-1. LED operate current vs. ambient temperature characteristics (DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



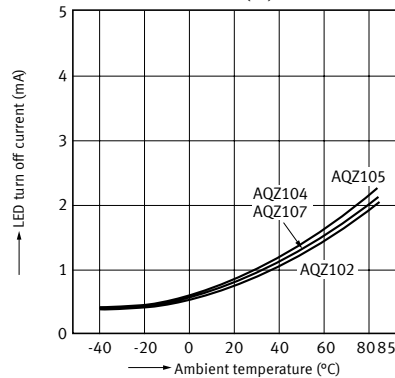
### 6-2. LED operate current vs. ambient temperature characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



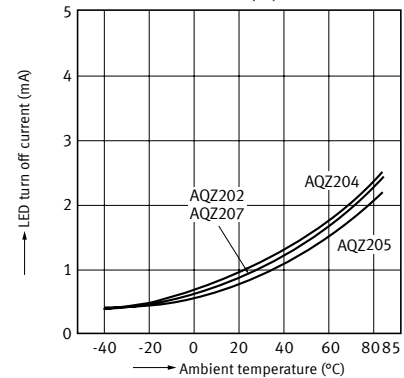
### 7-1. LED turn off current vs. ambient temperature characteristics (DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



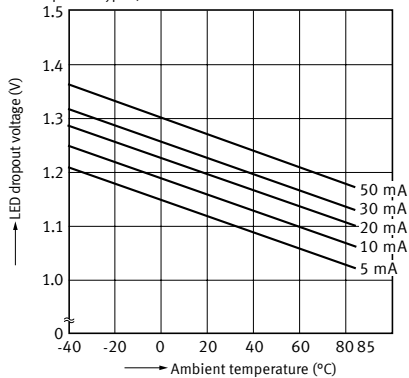
### 7-2. LED turn off current vs. ambient temperature characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



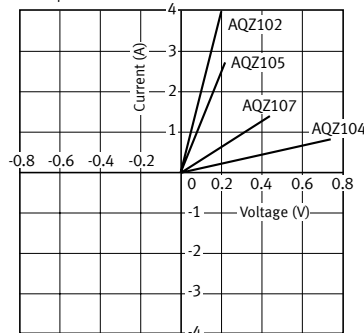
### 8. LED dropout voltage vs. ambient temperature characteristics

Sample: all types; LED current: 5 to 50 mA



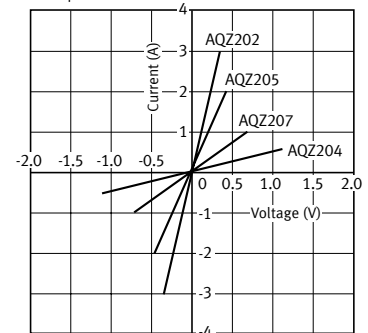
### 9-1. Current vs. voltage characteristics of output at MOS portion (DC type)

Ambient temperature: 25°C



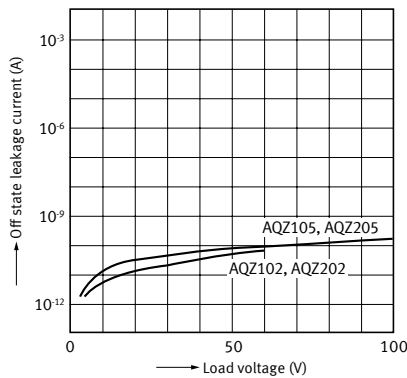
### 9-2. Current vs. voltage characteristics of output at MOS portion (AC/DC type)

Ambient temperature: 25°C



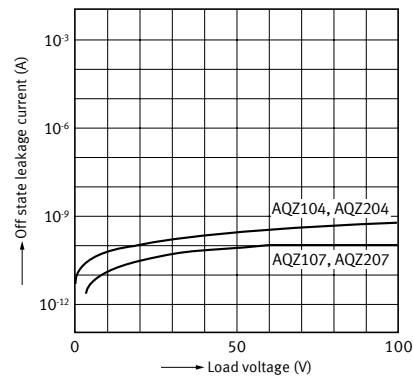
## 10-1. Off state leakage current vs. load voltage characteristics

Ambient temperature: 25°C



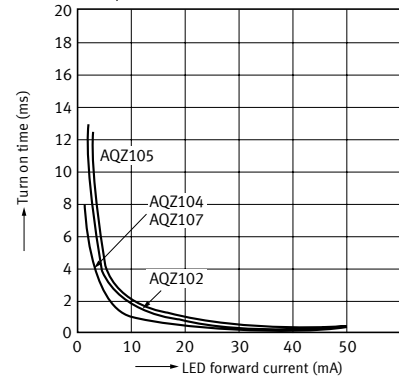
## 10-2. Off state leakage current vs. load voltage characteristics

Ambient temperature: 25°C



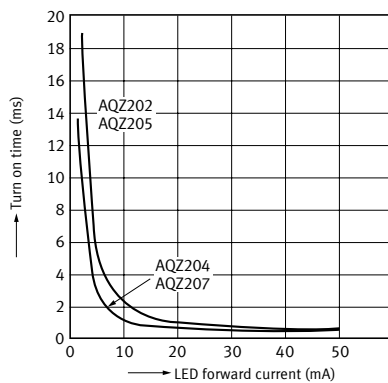
## 11-1. Turn on time vs. LED forward current characteristics (DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



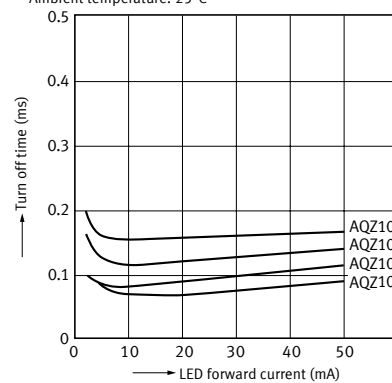
## 11-2. Turn on time vs. LED forward current characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



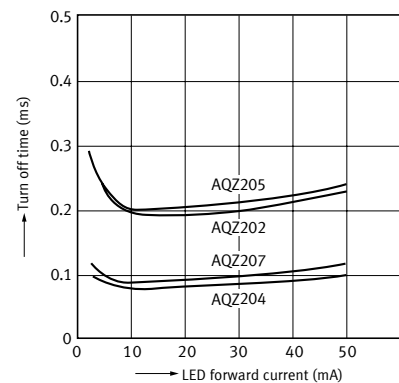
## 12-1. Turn off time vs. LED forward current characteristics (DC type)

Measured portion: between terminals 4 and 6;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



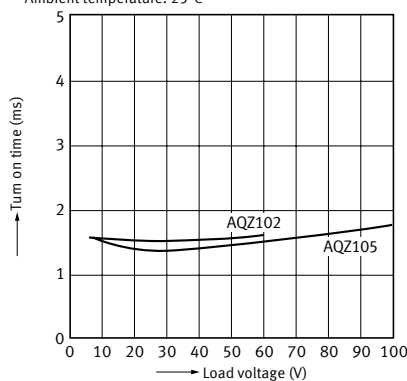
## 12-2. Turn off time vs. LED forward current characteristics (AC/DC type)

Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C



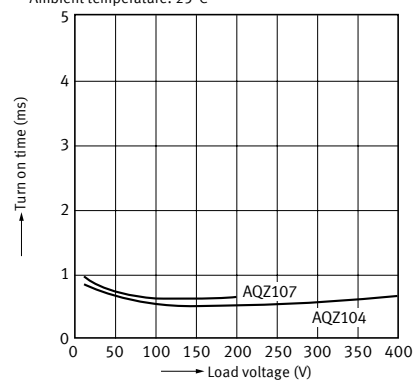
## 13-1. Turn on time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



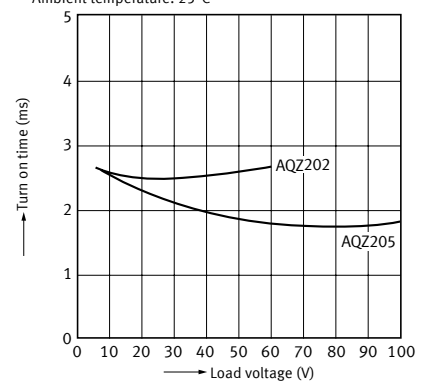
## 13-2. Turn on time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



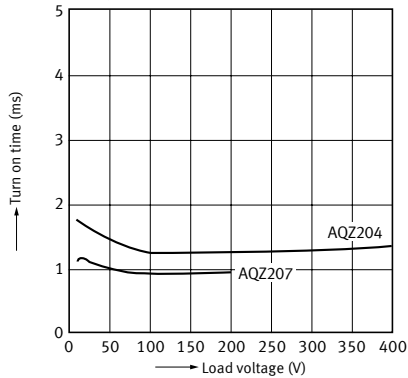
## 13-3. Turn on time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



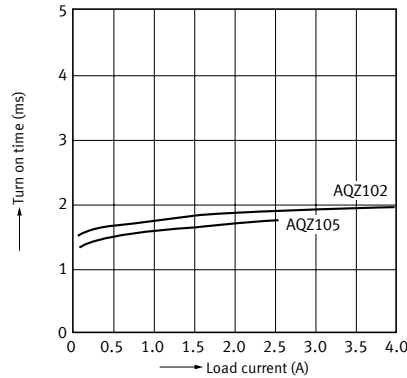
13-4. Turn on time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



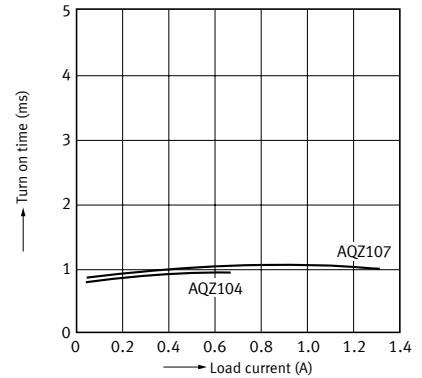
14-1. Turn on time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



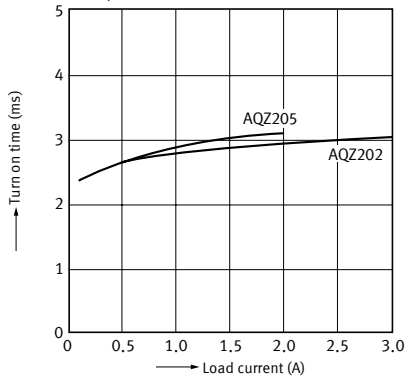
14-2. Turn on time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



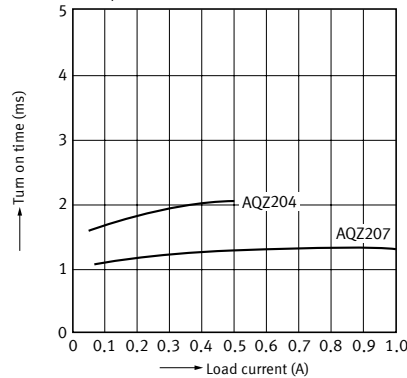
14-3. Turn on time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



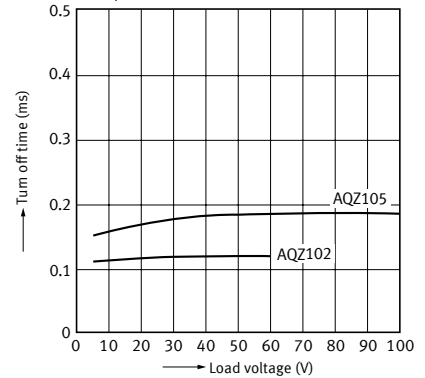
14-4. Turn on time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



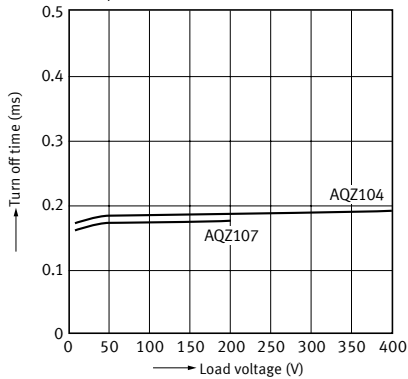
15-1. Turn off time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



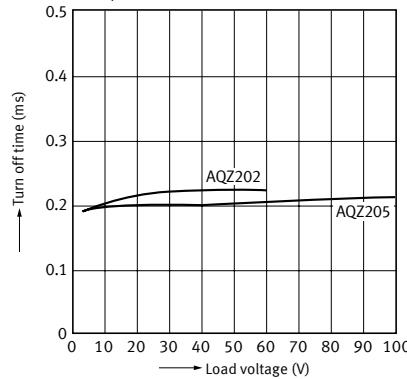
15-2. Turn off time vs. load voltage characteristics (DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



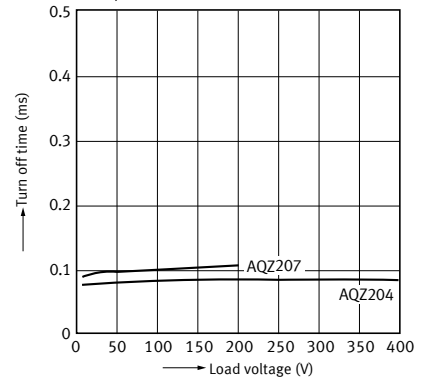
15-3. Turn off time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



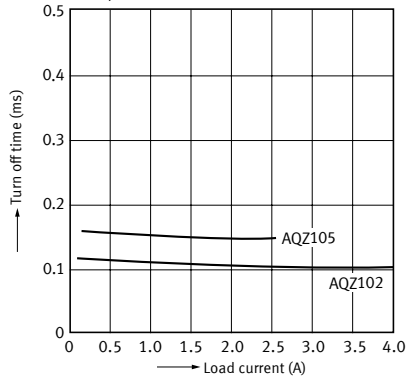
15-4. Turn off time vs. load voltage characteristics (AC/DC type)

LED current: 10 mA;  
Continuous load current: 100 mA;  
Ambient temperature: 25°C



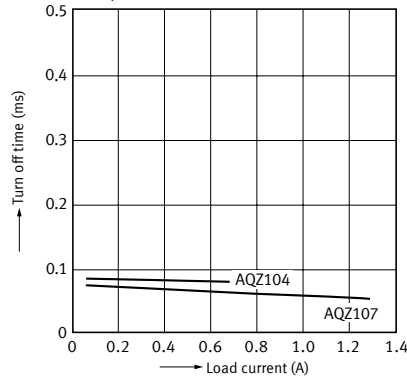
16-1. Turn off time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



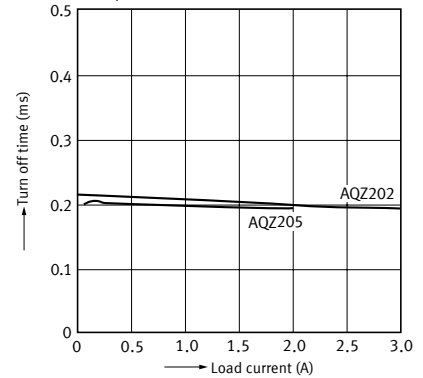
16-2. Turn off time vs. load current characteristics (DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



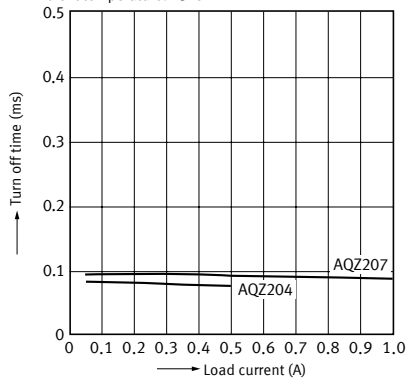
16-3. Turn off time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



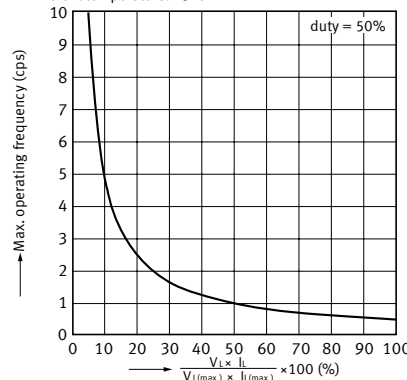
16-4. Turn off time vs. load current characteristics (AC/DC type)

LED current: 10 mA;  
Load voltage: 10 V (DC);  
Ambient temperature: 25°C



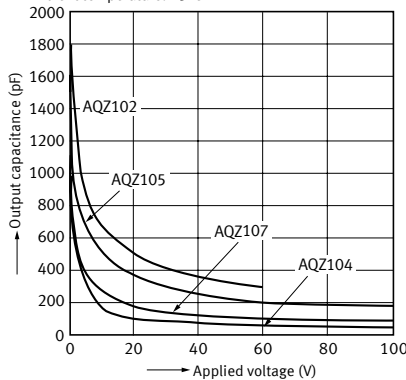
17. Max. operating frequency vs. load voltage and load current characteristics

Sample: All types;  
LED current: 10 mA;  
Ambient temperature: 25°C



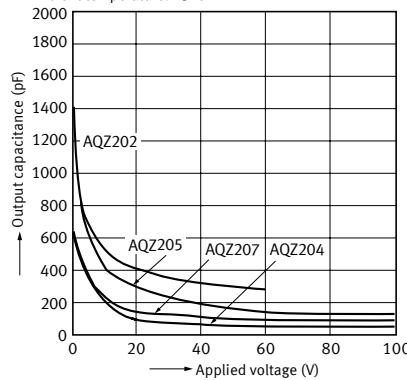
18-1. Output capacitance vs. applied voltage characteristics (DC type)

Frequency: 1 MHz;  
Ambient temperature: 25°C



18-2. Output capacitance vs. applied voltage characteristics (AC/DC type)

Frequency: 1 MHz;  
Ambient temperature: 25°C



## DIMENSIONS

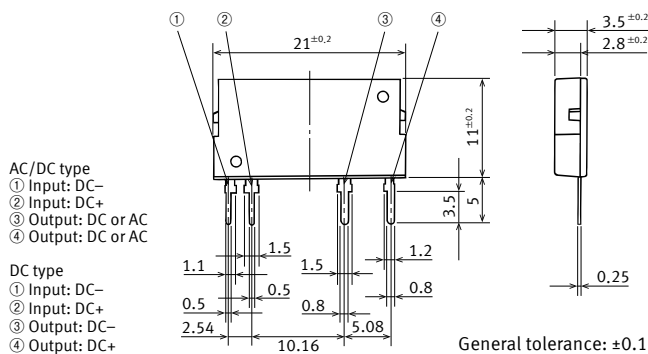
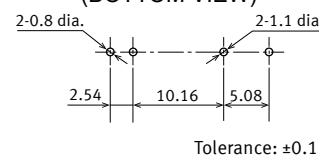
CAD The CAD data of the products with a "CAD" mark can be downloaded from our Website.

Unit: mm

## CAD



## External dimensions

PC board pattern  
(BOTTOM VIEW)

## SCHEMATIC AND WIRING DIAGRAMS

| Schematic | Output configuration | Load type | Connection | Wiring diagram |
|-----------|----------------------|-----------|------------|----------------|
|           | 1 Form A             | DC        | -          |                |
|           |                      | AC/DC     | -          |                |

## SAFETY STANDARDS

| Part No.       |        | UL (Recognized)            |                                     | CSA (Certified)            |                | Remarks                        |
|----------------|--------|----------------------------|-------------------------------------|----------------------------|----------------|--------------------------------|
|                |        | File No.<br>(Standard No.) | Contact rating                      | File No.<br>(Standard No.) | Contact rating |                                |
| DC only        | AQZ102 | E191218<br>(UL1577)        | 4.0A 60V DC                         | (Certified by C-UL)        |                | VDE approved<br>(Nr. 40051981) |
|                | AQZ105 |                            | 2.6A 100V DC                        |                            |                |                                |
|                | AQZ107 |                            | 1.3A 200V DC                        |                            |                |                                |
|                | AQZ104 |                            | 0.7A 400V DC                        |                            |                |                                |
| AC/DC dual use | AQZ202 |                            | 3.0A 60V AC (peak)<br>3.0A 60V DC   |                            |                |                                |
|                | AQZ205 |                            | 2.0A 100V AC (peak)<br>2.0A 100V DC |                            |                |                                |
|                | AQZ207 |                            | 1.0A 200V AC (peak)<br>1.0A 200V DC |                            |                |                                |
|                | AQZ204 |                            | 0.5A 400V AC (peak)<br>0.5A 400V DC |                            |                |                                |

Note: For the latest information on compliance with safety standards, please refer to our website.

Please refer to **"the latest product specifications"** when designing your product.

•Requests to customers:

<https://industrial.panasonic.com/ac/e/salespolicies/>

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Please contact .....

## Panasonic Corporation

Electromechanical Control Business Division

■1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8506, Japan  
[industrial.panasonic.com/ac/e/](http://industrial.panasonic.com/ac/e/)

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