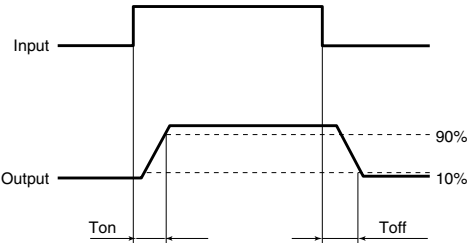


GU 1 Form A High Capacity (AQY212GH)

2. Electrical characteristics (Ambient temperature: 25°C 77°F)

Item			Symbol	AQY212GH(A)	Condition
Input	LED operate current	Typical	I <sub>Fon</sub>	1.1 mA	I <sub>L</sub> = 100mA
		Maximum		3 mA	
	LED turn off current	Minimum	I <sub>Foff</sub>	0.3 mA	I <sub>L</sub> = 100mA
		Typical		1.0 mA	
	LED dropout voltage	Typical	V <sub>F</sub>	1.32 V (1.14 V at I <sub>F</sub> = 5 mA)	I <sub>F</sub> = 50 mA
Maximum		1.5 V			
Output	On resistance	Typical	R <sub>on</sub>	0.34 Ω	I <sub>F</sub> = 5 mA
		Maximum		0.7 Ω	I <sub>L</sub> = Max. Within 1 s on time
	Off state leakage current	Maximum	I <sub>Leak</sub>	1 μA	I <sub>F</sub> = 0 mA V <sub>L</sub> = Max.
Transfer characteristics	Turn on time*	Typical	T <sub>on</sub>	1.3 ms	I <sub>F</sub> = 5 mA
		Maximum		5.0 ms	I <sub>L</sub> = 100 mA V <sub>L</sub> = 10 V
	Turn off time*	Typical	T <sub>off</sub>	0.1 ms	I <sub>F</sub> = 5 mA
		Maximum		0.5 ms	I <sub>L</sub> = 100 mA 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	

\*Turn on/Turn off time



RECOMMENDED OPERATING CONDITIONS

Please obey the following conditions to ensure proper device operation and resetting.

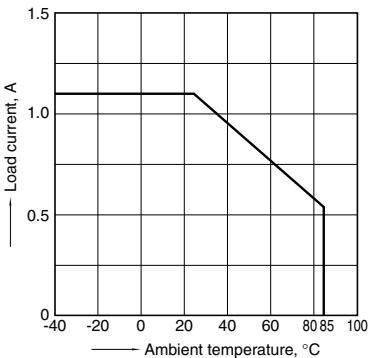
Item	Symbol	Recommended value	Unit
Input LED current	I <sub>F</sub>	5 to 10	mA

■ These products are not designed for automotive use.  
If you are considering to use these products for automotive applications, please contact your local Panasonic Corporation technical representative.

REFERENCE DATA

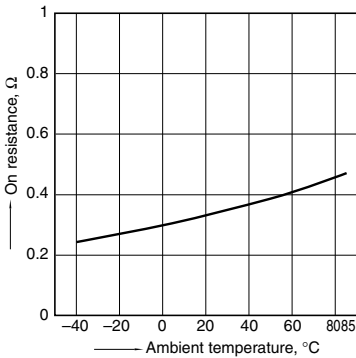
1. Load current vs. ambient temperature characteristics

Allowable ambient temperature: -40°C to +85°C  
-40°F to +185°F



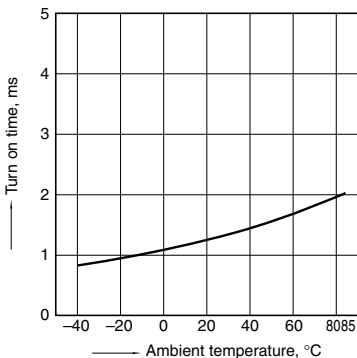
2. On resistance vs. ambient temperature characteristics

Measured portion: between terminals 3 and 4;  
LED current: 5 mA; Load voltage: Max. (DC)  
Continuous load current: Max.(DC)



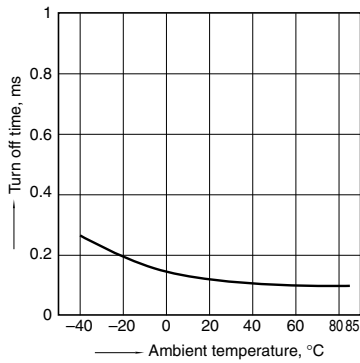
3. Turn on time vs. ambient temperature characteristics

LED current: 5 mA; Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



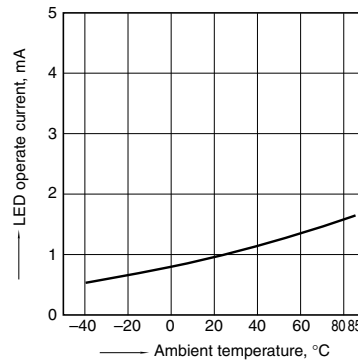
4. Turn off time vs. ambient temperature characteristics

LED current: 5 mA; Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC)



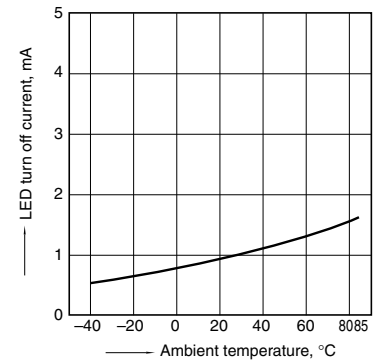
5. LED operate current vs. ambient temperature characteristics

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



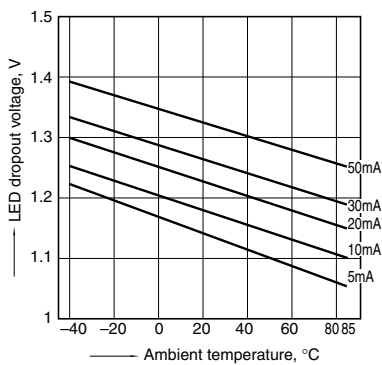
6. LED turn off current vs. ambient temperature characteristics

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



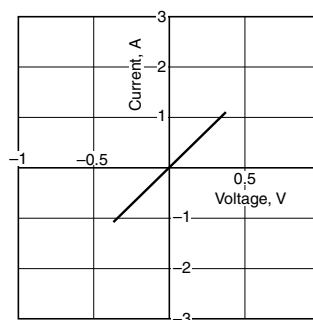
7. LED dropout voltage vs. ambient temperature characteristics

LED current: 5 to 50 mA



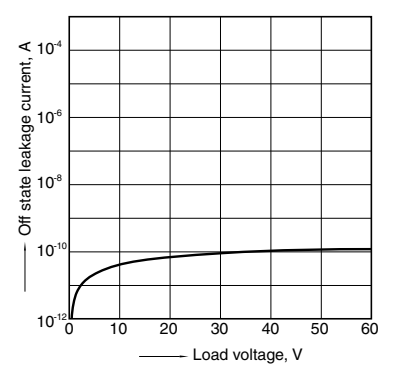
8. Current vs. voltage characteristics of output at MOS portion

Measured portion: between terminals 3 and 4;  
Ambient temperature: 25°C 77°F



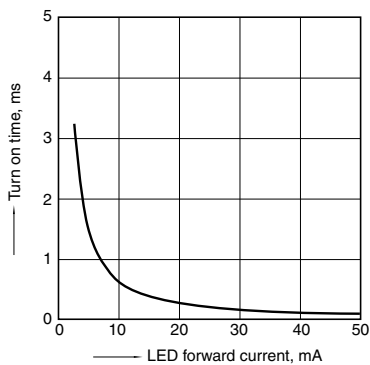
9. Off state leakage current vs. load voltage characteristics

Measured portion: between terminals 3 and 4;  
Ambient temperature: 25°C 77°F



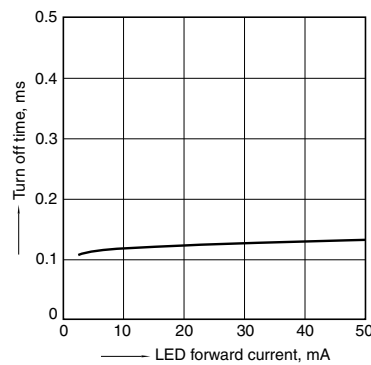
10. Turn on time vs. LED forward current characteristics

Measured portion: between terminals 3 and 4;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C 77°F



11. Turn off time vs. LED forward current characteristics

Measured portion: between terminals 3 and 4;  
Load voltage: 10 V (DC);  
Continuous load current: 100 mA (DC);  
Ambient temperature: 25°C 77°F



12. Output capacitance vs. applied voltage characteristics

Measured portion: between terminals 3 and 4;  
Frequency: 1 MHz;  
Ambient temperature: 25°C 77°F

