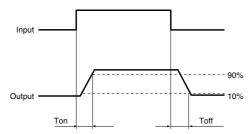
GU 1 Form A High Capacity (AQY212GH)

	Item			AQY212GH(A)	Condition
Input	LED operate current	Typical	Fon	1.1 mA	IL = 100mA
		Maximum		3 mA	
	LED turn off current	Minimum	- IFoff	0.3 mA	I∟ = 100mA
		Typical		1.0 mA	
	LED dropout voltage	Typical	VF	1.32 V (1.14 V at I⊧ = 5 mA)	I⊧ = 50 mA
		Maximum		1.5 V	
Output	On resistance	Typical	- Ron	0.34 Ω	l⊧ = 5 mA
		Maximum		0.7 Ω	l∟ = Max. Within 1 s on time
	Off state leakage current	Maximum	Leak	1 μΑ	$I_F = 0 \text{ mA}$ $V_L = Max.$
Transfer characteristics	Turn on time*	Typical	- Ton	1.3 ms	l⊧ = 5 mA
		Maximum		5.0 ms	IL = 100 mA VL = 10 V
	Turn off time*	Typical	- T _{off}	0.1 ms	IF = 5 mA IL = 100 mA VL = 10 V
		Maximum		0.5 ms	
	I/O capacitance	Typical	Ciso	0.8 pF	f = 1 MHz
		Maximum		1.5 pF	$V_B = 0 V$
	Initial I/O isolation resistance	Minimum	Riso	1,000 MΩ	500 V DC

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

*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	lF	5 to 10	mA

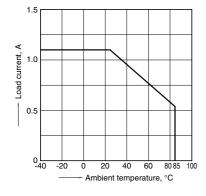
■ These products are not designed for automotive use.

If you are considering to use these products for automotive applications, please contact your local Panasonic Corporation technical representative.

REFERENCE DATA

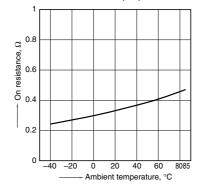
1. Load current vs. ambient temperature characteristics

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



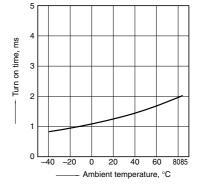
2. On resistance vs. ambient temperature characteristics

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

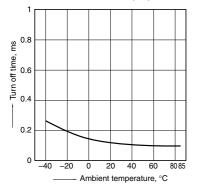
LED current: 5 mA; Load voltage: 10 V (DC); Continuous load current: 100 mA (DC)



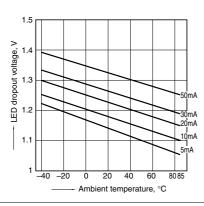
Panasonic Corporation Automation Controls Business Division

4. Turn off time vs. ambient temperature characteristics

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



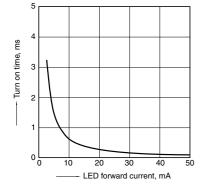
7. LED dropout voltage vs. ambient temperature characteristics LED current: 5 to 50 mA

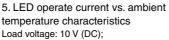


10. Turn on time vs. LED forward current characteristics

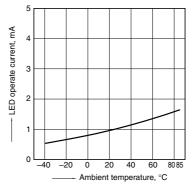
Measured portion: between terminals 3 and 4; Load voltage: 10 V (DC);

Continuous load current: 100 mA (DC); Ambient temperature: 25°C 77°



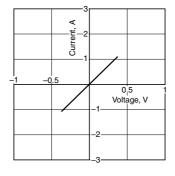


Continuous load current: 100mA (DC)



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

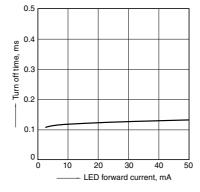
Measured portion: between terminals 3 and 4; Ambient temperature: 25°C 77°F



11. Turn off time vs. LED forward current characteristics

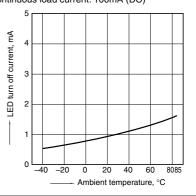
Measured portion: between terminals 3 and 4: Load voltage: 10 V (DC);

Continuous load current: 100 mA (DC); Ambient temperature: 25°C 77



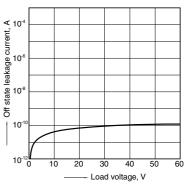
6. LED turn off current vs. ambient temperature characteristics

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



9. Off state leakage current vs. load voltage characteristics

Measured portion: between terminals 3 and 4; 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

