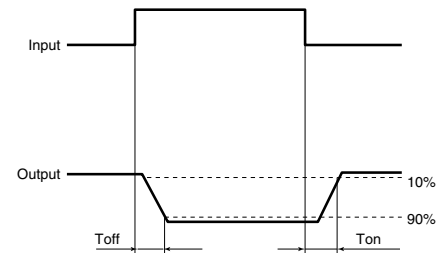


GE 2 Form B (AQW414EH)

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

Item		Symbol	AQW414EH(A)	Condition
Input	LED operate (OFF) current	Typical	1.3mA	I _L =Max.
		Maximum	3.0mA	
	LED reverse (ON) current	Minimum	0.4mA	I _L =Max.
		Typical	1.2mA	
LED dropout voltage	Typical	V _F	1.25 (1.14 V at I _F =5mA)	I _F =50mA
	Maximum		1.5V	
Output	On resistance	Typical	26Ω	I _F =0mA I _L =Max. Within 1 s
		Maximum	35Ω	
	Off state leakage current	Maximum	I _{LLeak}	10μA
Transfer characteristics	Operate (OFF) time*	Typical	0.8ms	I _F =0mA → 5mA I _L =Max.
		Maximum	3.0ms	
	Reverse (ON) time*	Typical	0.2ms	I _F =5mA → 0mA I _L =Max.
		Maximum	1.0ms	
	I/O capacitance	Typical	C _{iso}	0.8pF
Maximum			1.5pF	
Initial I/O isolation resistance	Minimum	R _{iso}	1,000MΩ	500V DC

*Operate/Reverse time



3. Recommended operating conditions (Ambient temperature: 25°C 77°F)

Please use under recommended operating conditions to obtain expected characteristics.

Item	Symbol	Number of used channels	Min.	Max.	Unit
LED current	I _F		5	30	mA
Load voltage (Peak AC)	V _L		—	320	V
AQW414EH(A)	Continuous load current	1ch	—	0.13	A
		2ch	—	0.1	

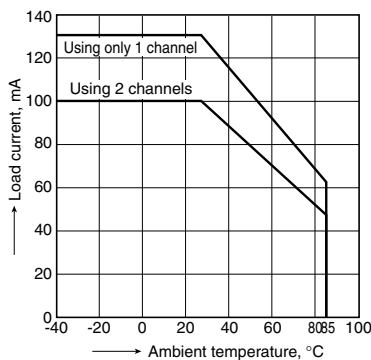
■ These products are not designed for automotive use.

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

REFERENCE DATA

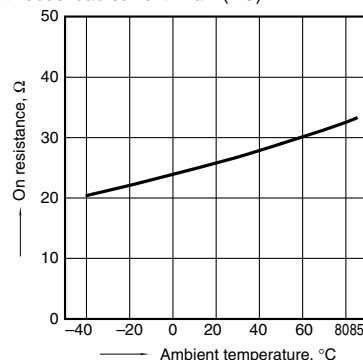
1. Load current vs. ambient temperature characteristics

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



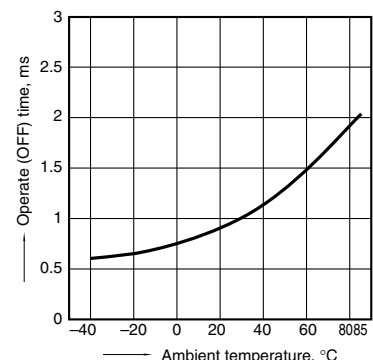
2. On resistance vs. ambient temperature characteristics

Measured portion: between terminals 5 and 6, 7 and 8;
LED current: 0 mA; Load voltage: Max. (DC);
Continuous load current: Max. (DC)



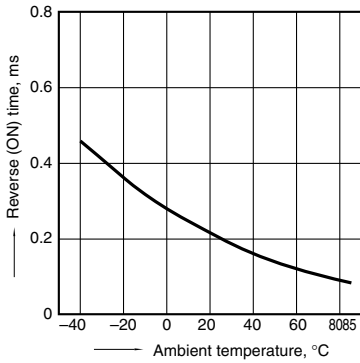
3. Operate (OFF) time vs. ambient temperature characteristics

LED current: 5 mA; Load voltage: Max. (DC);
Continuous load current: Max. (DC)



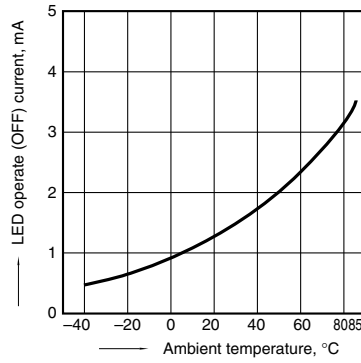
4. Reverse (ON) time vs. ambient temperature characteristics

LED current: 5 mA; Load voltage: Max. (DC); Continuous load current: Max. (DC)



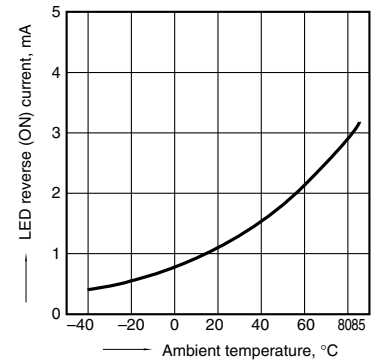
5. LED operate (OFF) current vs. ambient temperature characteristics

Load voltage: Max. (DC); Continuous load current: Max. (DC)



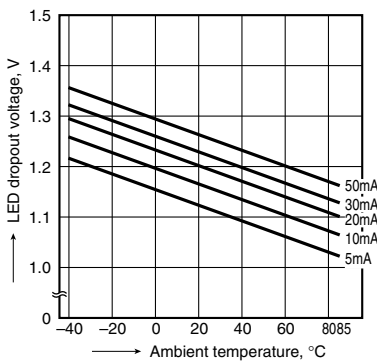
6. LED reverse (ON) current vs. ambient temperature characteristics

Load voltage: Max. (DC); Continuous load current: Max. (DC)



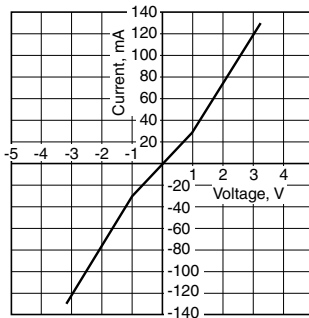
7. LED dropout voltage vs. ambient temperature characteristics;

LED current: 5 to 50 mA



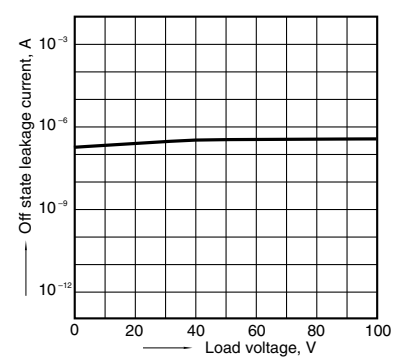
8. Current vs. voltage characteristics of output at MOS portion

Measured portion: between terminals 5 and 6, 7 and 8; Ambient temperature: 25°C 77°F



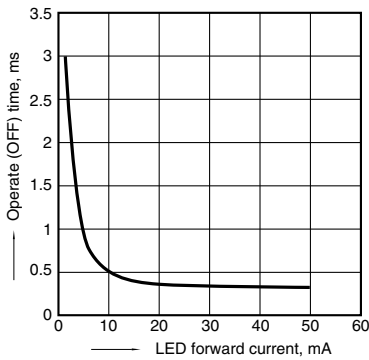
9. Off state leakage current vs. load voltage characteristics

Measured portion: between terminals 5 and 6, 7 and 8; Ambient temperature: 25°C 77°F



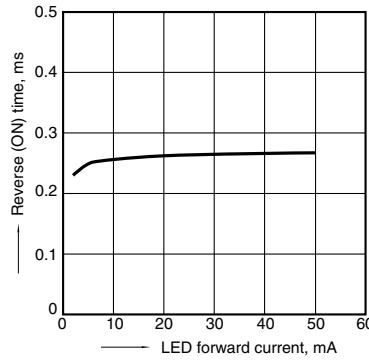
10. Operate (OFF) time vs. LED forward current characteristics

Measured portion: between terminals 5 and 6, 7 and 8; Load voltage: Max. (DC); Continuous load current: Max. (DC); Ambient temperature: 25°C 77°F



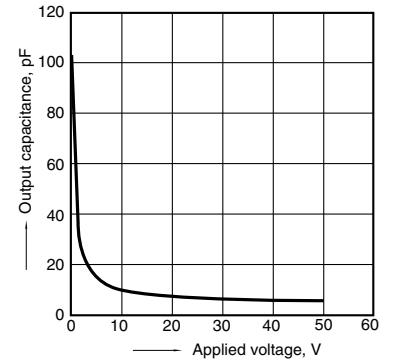
11. Reverse (ON) time vs. LED forward current characteristics

Measured portion: between terminals 5 and 6, 7 and 8; Load voltage: Max. (DC); Continuous load current: Max. (DC); Ambient temperature: 25°C 77°F



12. Output capacitance vs. applied voltage characteristics

Measured portion: between terminals 5 and 6, 7 and 8; Frequency: 1 MHz; Ambient temperature: 25°C 77°F



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