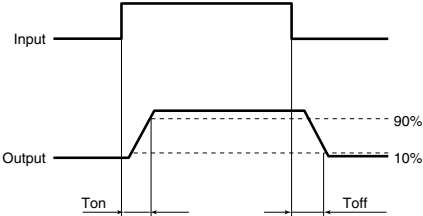


2. Electrical characteristics (Ambient temperature: 25°C 77°F)

Item			Symbol	Type of connection	AQV234(A)	Condition
Input	LED operate current	Typical	I _{Fon}	—	0.31 mA	$\Delta I_F/\Delta t \geq 100 \mu A/s$ I _L = Max.
		Maximum			0.5 mA	
	LED turn off current	Minimum	I _{Foff}	—	0.1 mA	$\Delta I_F/\Delta t \geq 100 \mu A/s$ I _L = Max.
		Typical			0.29 mA	
	LED dropout voltage	Typical	V _F	—	1.25 V (1.1 V at I _F = 2 mA)	I _F = 50 mA
Maximum		1.5 V				
Output	On resistance	Typical	R _{on}	A	30 Ω	I _F = 2 mA, I _L = Max. Within 1 s
		Maximum			50 Ω	
		Typical	R _{on}	B	22.5 Ω	I _F = 2 mA, I _L = Max. Within 1 s
		Maximum			25 Ω	
		Typical	R _{on}	C	11.3 Ω	I _F = 2 mA, I _L = Max. Within 1 s
		Maximum			12.5 Ω	
	Off state leakage current	Maximum	I _{Leak}	—	1 μA	I _F = 0 mA, V _L = Max.
Transistor characteristics	Turn on time*	Typical	T _{on}	—	0.89 ms	I _F = 2 mA I _L = Max.
		Maximum			2 ms	
	Turn off time*	Typical	T _{off}	—	0.22 ms	I _F = 2 mA I _L = Max.
		Maximum			1 ms	
	I/O capacitance	Typical	C _{iso}	—	0.8 pF	f = 1 MHz V _B = 0 V
		Maximum			1.5 pF	
Initial I/O isolation resistance	Minimum	R _{iso}	—	1,000 MΩ	500 V DC	

*Turn on/Turn off time



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

Please use under recommended operating conditions to obtain expected characteristics.

Item		Symbol	Min.	Max.	Unit
LED current		I _F	2	30	mA
AQV234(A)	Load voltage (Peak AC)	V _L	—	320	V
	Continuous load current (A connection)	I _L	—	0.12	A

■ These products are not designed for automotive use.

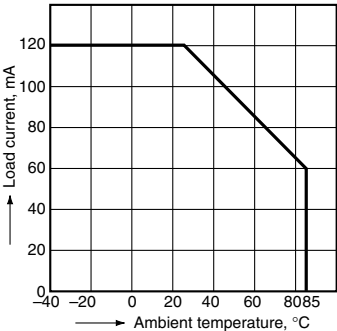
If you are considering to use these products for automotive applications, please contact your local Panasonic Corporation technical representative.

REFERENCE DATA

1. Load current vs. ambient temperature characteristics

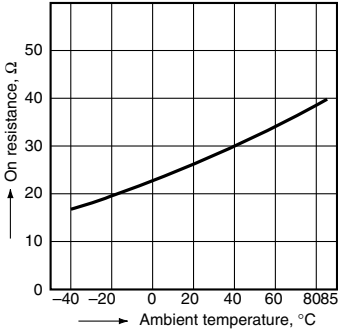
Allowable ambient temperature: -40 to +85°C
-40 to +185°F

Type of connection: A



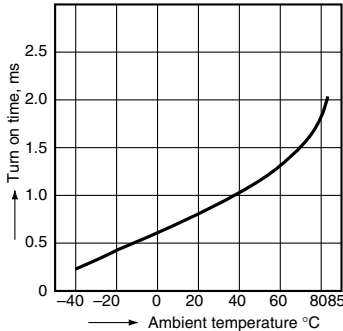
2. On resistance vs. ambient temperature characteristics

Measured portion: between terminals 4 and 6;
LED current: 2 mA; Load voltage: 400 V (DC);
Continuous load current: 120 mA (DC)



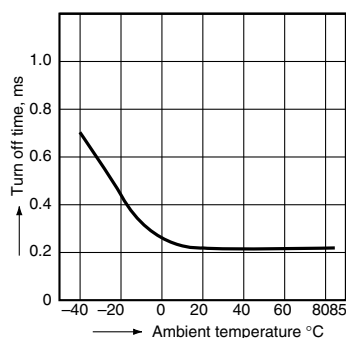
3. Turn on time vs. ambient temperature characteristics

LED current: 2 mA;
Load voltage: 400 V (DC);
Continuous load current: 120 mA (DC)



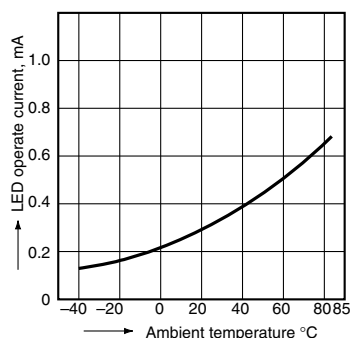
4. Turn off time vs. ambient temperature characteristics

LED current: 2 mA; Load voltage: 400 V (DC);
Continuous load current: 120 mA (DC)



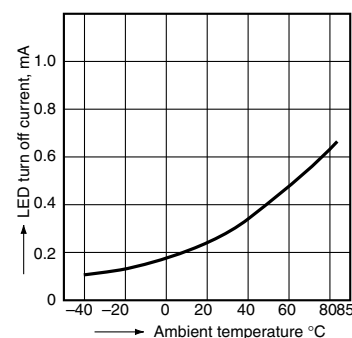
5. LED operate current vs. ambient temperature characteristics

Load voltage: 400 V (DC);
Continuous load current: 120 mA (DC)



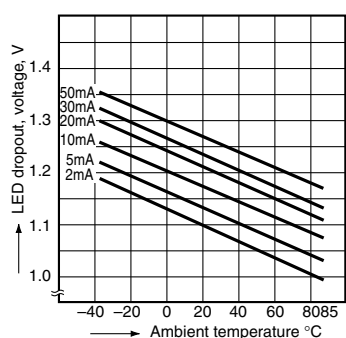
6. LED turn off current vs. ambient temperature characteristics

Load voltage: 400 V (DC);
Continuous load current: 120 mA (DC)



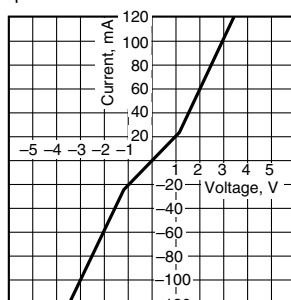
7. LED dropout voltage vs. ambient temperature characteristics

LED current: 2 to 50 mA



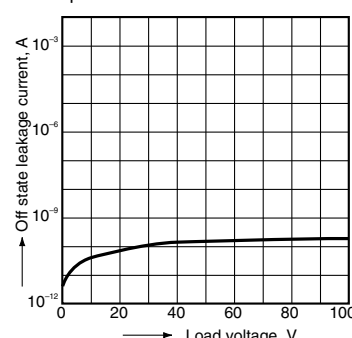
8. Current vs. voltage characteristics of output at MOS portion

Measured portion: between terminals 4 and 6;
Ambient temperature: 25°C 77°F



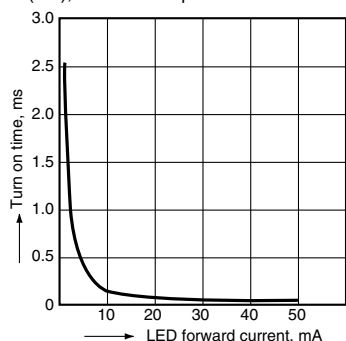
9. Off state leakage current vs. load voltage characteristics

Measured portion: between terminals 4 and 6;
Ambient temperature: 25°C 77°F



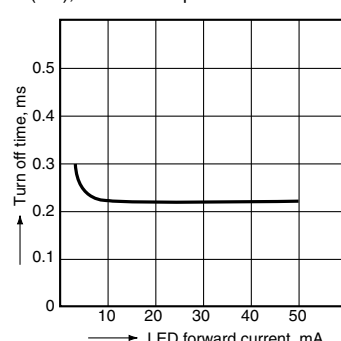
10. Turn on time vs. LED forward current characteristics

Measured portion: between terminals 4 and 6;
Load voltage: 400 V (DC); Continuous load current:
120 mA (DC); Ambient temperature: 25°C 77°F



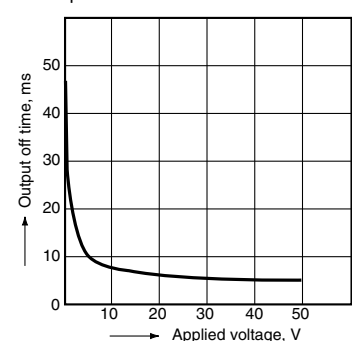
11. Turn off time vs. LED forward current characteristics

Measured portion: between terminals 4 and 6;
Load voltage: 400 V (DC); Continuous load current:
120 mA (DC); Ambient temperature: 25°C 77°F



12. Output capacitance vs. applied voltage characteristics

Measured portion: between terminals 4 and 6;
Frequency: 1 MHz;
Ambient temperature: 25°C 77°F



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