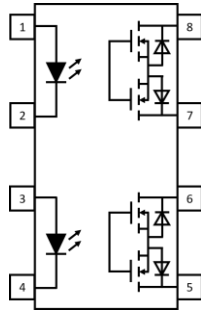
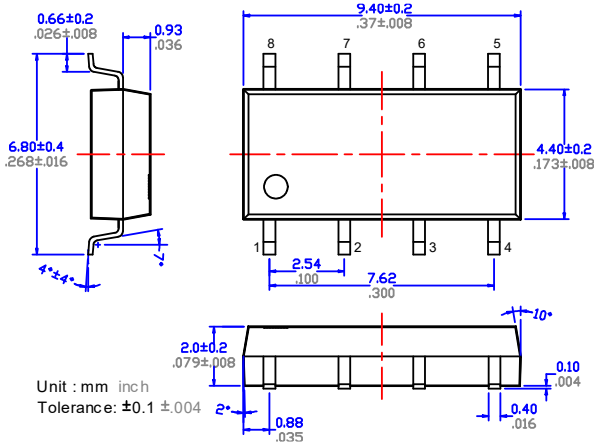


Miniature SOP-8pin type
of 20V load voltage

PHOTO DMOS RELAY AW2GS

2 From A



- 1,3. LED Anode
- 2,4. LED Cathode
- 5,6,7,8. MOSFET Drain

FEATURE

1. Continuous load current: Max. 1.7A.
2. Load on resistance: Typ. 0.5Ω.
3. Loading voltage 20V DC or AC peak.
4. Off-state leakage current: 1μA.

TYPICAL APPLICATIONS

- Measurement and test equipment
- Telecommunications
- Security equipment
- Industrial machinery and equipment

Absolute maximum ratings (Ambient temperature 25 °C)

Item		Symbol	Value	Units	Not
Input	Continuous LED current	I_F	50	mA	
	Peak LED current	I_{FP}	1000	mA	f=100Hz, DC 1%
	LED reverse voltage	V_R	5	V	
	Input power dissipation	P_{in}	75	mW	
Output	Load voltage	V_L	20	V	DC or AC peak
	Load current	I_L	1700	mA	
	Peak load current	I_{peak}	3500	mA	100ms(1 pulse)
	Output power dissipation	P_{out}	500	mW	
Total power dissipation		P_T	550	mW	
I/O isolation voltage		V_{iso}	1500	Vrms	RH 60, 1min
Operating temperature		T_{opr}	-40o +85	°C	
Storage temperature		T_{stg}	-40 to +100	°C	
Soldering temperature		T_{sol}	260	°C	10sec max.

Electrical specifications (Ambient temperature 25 °C)

Item		Symbol	Min.	Typ.	Max.	Units	Condition
Input	LED forward voltage	V_F		1.2	1.4	V	$I_F=10mA$
	Operating LED current	I_{Fon}		0.5	3.0	mA	
	Recover LED current	I_{Foff}	0.1	0.35		mA	
	Recover LED voltage	V_{Foff}	0.5			V	
Output	On resistance	R_{on}		0.5	1.2	Ω	$I_F=5mA, I_L=100mA$
	Off-state leakage current	I_{leak}			1.0	μA	$V_L=Rating$
	Output capacitance	C_{out}		500		pF	$V_L=0V, f=1MHz$
Transmission	Turn on time	T_{on}		1.5	3.0	ms	$I_F=5mA, I_L=100mA$
	Turn off time	T_{off}		0.05	0.1	ms	
Coupled	I/O isolation resistance	$R_{I/O}$	10^9			Ω	DC 500V
	I/O capacitance	$C_{I/O}$		0.8	1.5	pF	f=1MHz



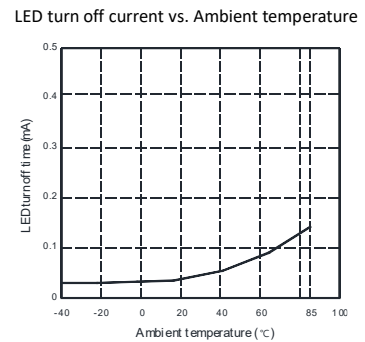
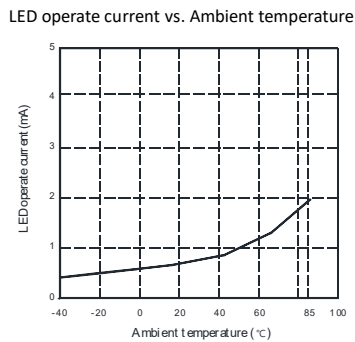
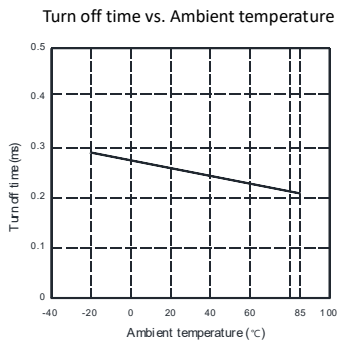
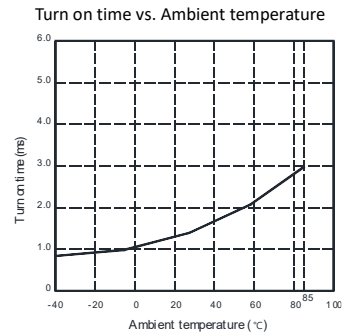
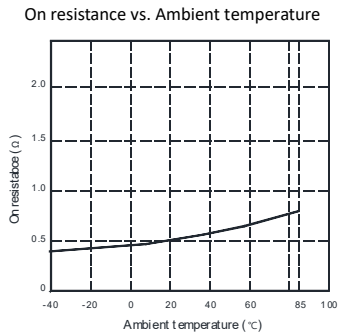
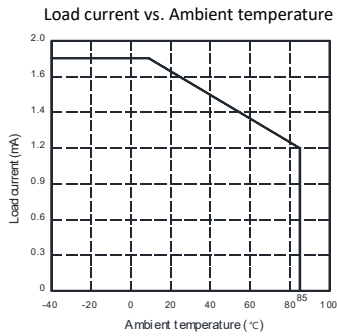
RAPIDTEK PHOTO DMOD RELAY

Rapidtek Magnetic Devices Inc.
<http://www.rapidtek.net>

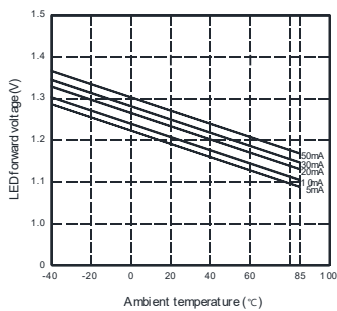
PHOTO DMOS RELAY

2 Form A Photo Relay

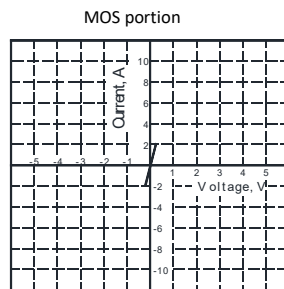
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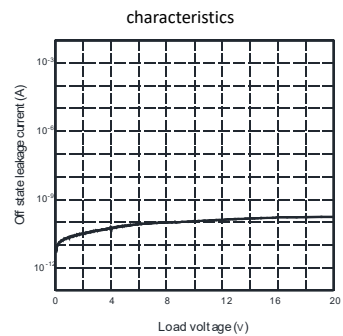
LED forward voltage vs. Ambient temperature



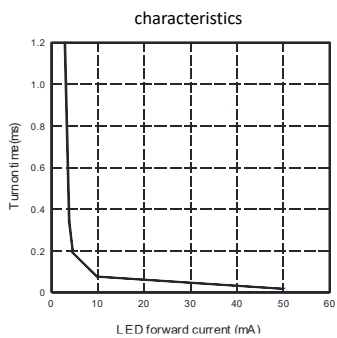
Voltage vs. current characteristics of output at



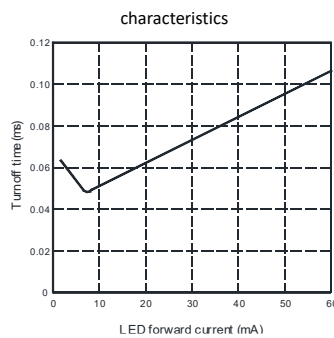
Off state leakage current vs. Load voltage



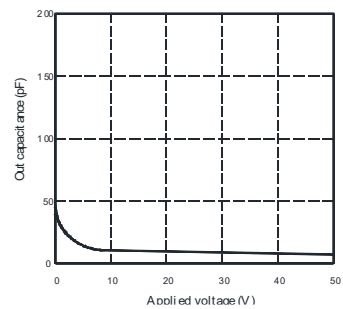
LED forward current vs. Turn on time



LED forward current vs. Turn off time



Applied voltage vs. Output capacitance characteristics



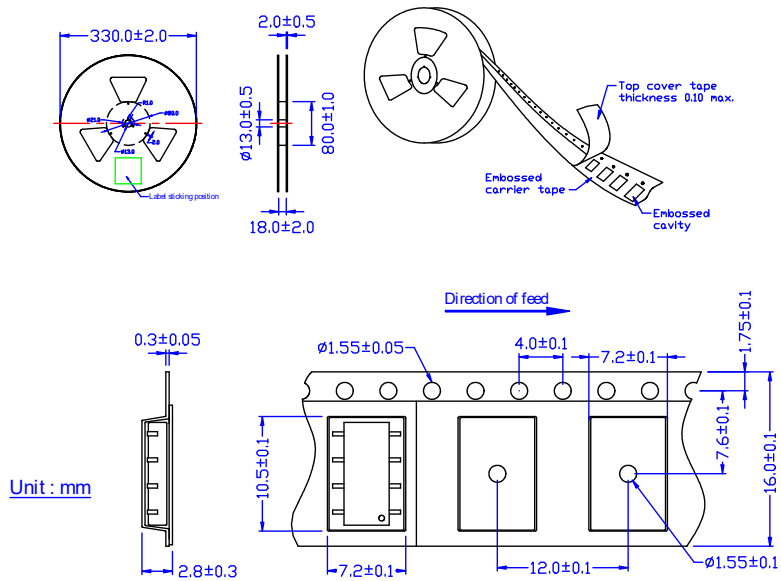
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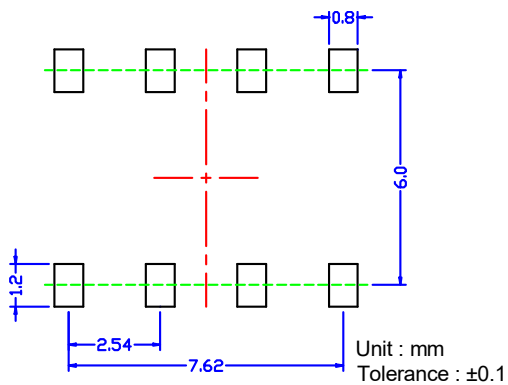
Taping specifications for surface mount devices



Package	Part No.		Packing quantity	
	Tube packing	Tape & Reel packing	Tube	Tape & Reel
SOP8	AW2GS	AW2GS-R1	50pcs/1tube	1000 pcs

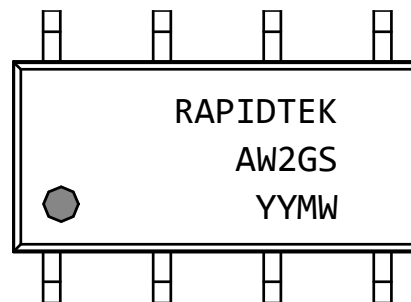
Dimension

Recommended mounting pad



Marking

(Each photo MOS Relay shall be marked with the following information)



YY : Year, M : Monthly, W : Weeks



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<http://www.rapidtek.net>