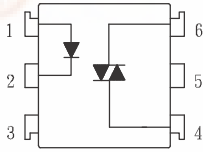




Schematic:



For dimensions and pin-outs, see the last page of this document.

Features:

1. Compact dual-in-line package
2. 600V peak blocking voltage
3. Isolation voltage between input and output (Viso:5000Vrms).

Ordering:

Suffix to Standard Part Number

- V = VDE Approved
- G = 10mm Lead Spread
- S = Surface Mount Lead-form
- T = Tape & Reel

Equivalents:

This part equals/exceeds all specifications of:

- MOC3051, 2

Absolute Maximum Ratings:

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Input	Forward current	IF	50 mA
	Peak forward current (100us)	IFM	1 A
	Reverse voltage	VR	6 V
	Power dissipation	PD	70 mW
Output	Off-State Output Terminal voltage	VDRM	600 Vpeak
	On-State R. M. S. Current	IT(RMS)	100 mA
	Peak Repetitive Surget Current (PW=10ms, DC 10%)	ITSM	6 A
	Power dissipation	PD	300 mW
Total power dissipation	Ptot	330 mW	
Isolation voltage 1 minute	Viso	5000 Vrms	
Operating temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-50 to +125	°C
Soldering temperature 10 second	Tsol	260	°C

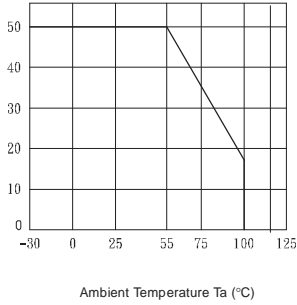
Electrical Characteristics:

(Ta=25°C)

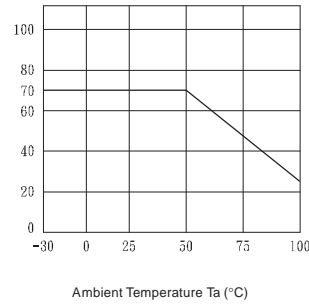
Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	VF	—	1.2	1.4	V
	Peak forward voltage	VFM	IFM=0.5A	—	—	3.5 V
	Reverse Leakage Current	IR	VR=4V	—	—	10 μA
Output	Peak Blocking Current	IDRM	VDRM=600V	—	—	100 nA
	ON-State Voltage	VTM	ITM=100mA	—	1.6	2.8 V
Transfer characteristics	Holding Current	IH		—	1.0	— mA
	Critical rate of rise of OFF-state voltage	dV/dt	VDRM= (1/	600	—	— V/μS
	Isolation resistance	Riso	DC500V	5x10 <sup>10</sup>	10 <sup>11</sup>	— ohm
	Minimum trigger current	IFT	Main Terminal Voltage=3V	—	—	5 mA
	Ton	Vd=6V, RL=100 ohm, IF=20mA	—	—	100 μS	



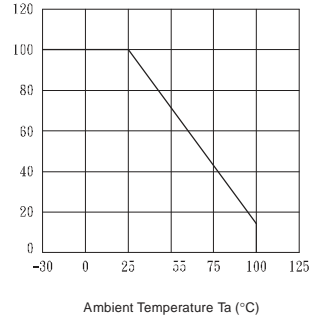
**Fig.1** Forward Current vs. Ambient Temperature



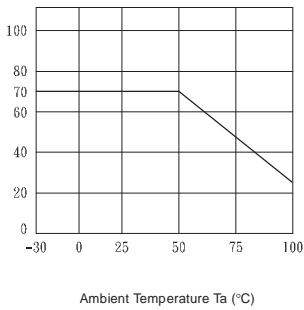
**Fig.2** Diode Power Dissipation vs. Ambient Temperature



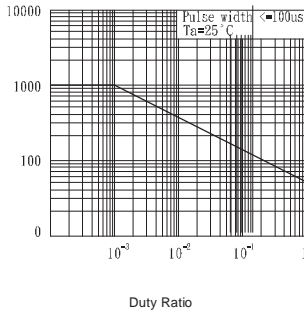
**Fig.3** On-State R. M. S. Current vs. Ambient Temperature



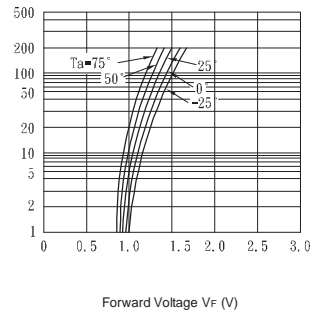
**Fig.4** Total Power Dissipation vs. Ambient Temperature



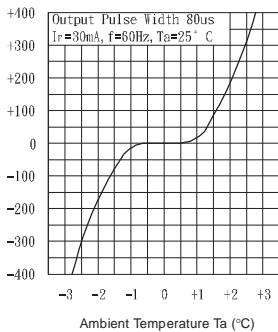
**Fig.5** Peak Forward Current vs. Duty Ratio



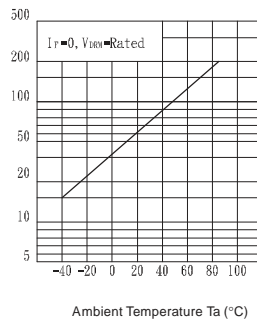
**Fig.6** Forward Current vs. Forward Voltage



**Fig.7** On-State Characteristics



**Fig.8** Leakage with LED off vs. Ambient Temperature



**Fig.9** Trigger Current vs. Ambient Temperature

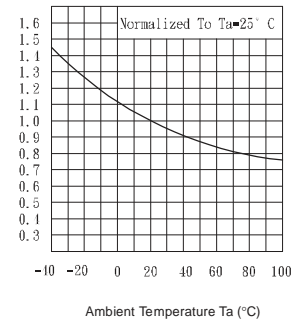


Fig.4 : 6-pin DIP type

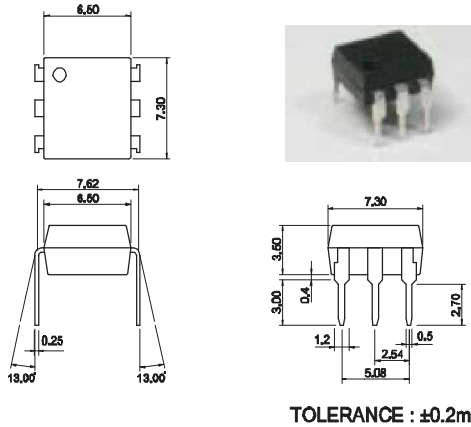


Fig.5 : 6-pin SMD type

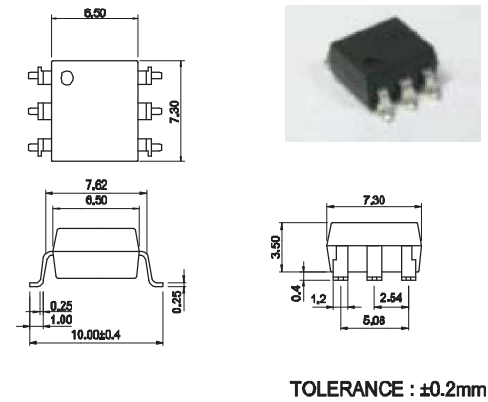


Fig.6 : 6-pin type

