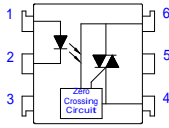


Schematic:



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:5300Vrms).
4. 5mA max trigger current

Equivalents:

This part equals/exceeds all specifications of:

Ordering:

Suffix to Standard Part Number

- V = VDE Compliant
- G = 10mm Lead Spread
- S = Surface Mount Lead-form
- T = Tape & Reel
- MOC3030, 31, 32, 33
- MOC3040, 41, 42, 43
- MOC3060, 61, 62, 63

Absolute Maximum Ratings:

Parameter		Symbol	Rating	Unit
Input	Forward current	IF	50	mA
	Peak forward current	IFM	1	A
	Reverse voltage	VR	6	V
	Power dissipation	PD	70	mW
Output	Off-State Output Terminal voltage	VDRM	600	VPEAK
	Peak Repetitive Surget Current (PW=10ms.DC 10%)	ITSM	1	A
	Power dissipation	PD	300	mW
Total power dissipation		Ptot	330	mW
Isolation voltage 1 minute		Viso	5300	Vrms
Operating temperature		Topr	-40 to +80	°C
Storage temperature		Tstg	-40 to +150	°C
Soldering temperature 10 second		Tsol	260	°C

Electrical Characteristics:

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	VF	IF=10mA	-	1.2	1.4	V
	Reverse current	IR	VR=4V	-	-	10	uA
Output	Peak Blocking Current	IDRM	VDRM=400V	-	60	500	nA
	ON-State Voltage	VTM	ITM=100mA	-	1.8	3	V
Transfer characteristics	Holding Current	IH		-	100	-	uA
	Critical rate of rise of OFF-state Voltage	dV/dt	VDRM=(1/√2)*Rated	600	-	-	V/uS
	Inhibit Voltage	INH	IF= Rated IFT	-	5	20	V
	Leakage in Inhibited State	IDRM2	IF & VDRM=Rated Off State	-	-	500	uA
	Isolation resistance	Riso	DC500V	5x10 <sup>10</sup>	10 <sup>11</sup>	-	ohm
	Trigger current	IFT	Main Terminal Voltage=3V	-	-	5	mA

Fig.1 Forward Current vs. Ambient Temperature

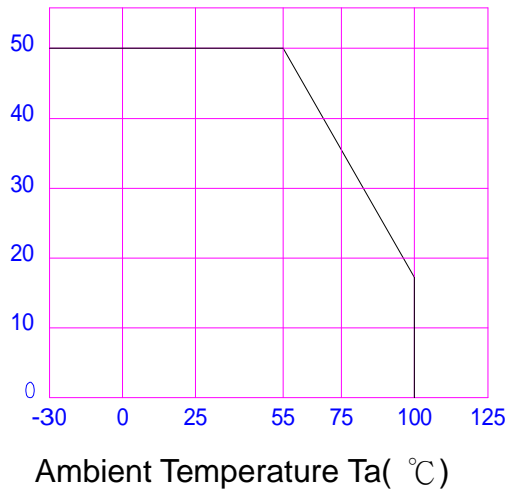


Fig.2 Diode Power Dissipation vs. Ambient Temperature

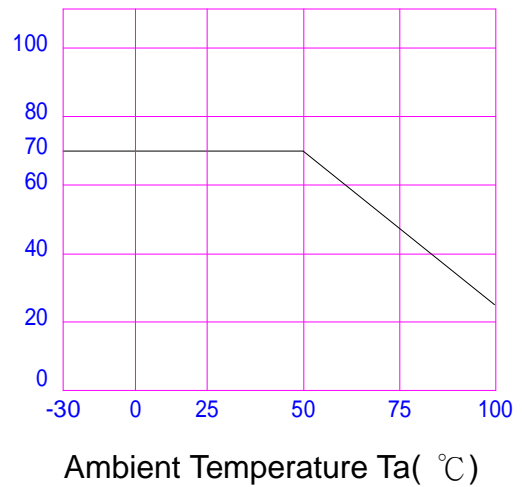


Fig.3 On-State R.M.S. Current vs. Ambient Temperature

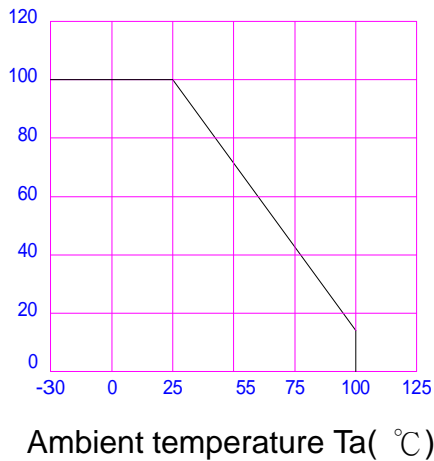


Fig.4 Total Power Dissipation vs. Ambient Temperature

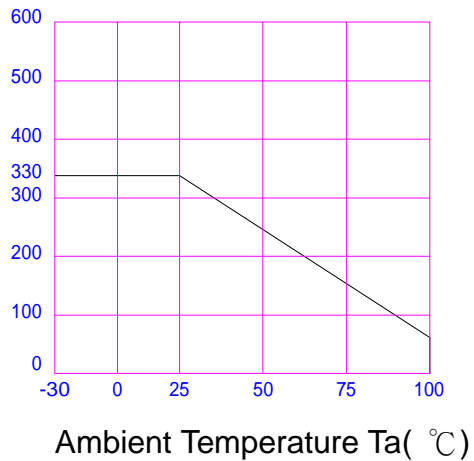


Fig.5 Peak Forward Current vs. Duty Ratio

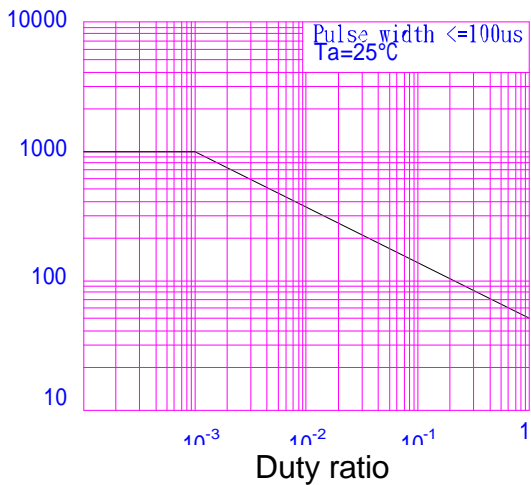


Fig.6 Forward Current vs. Forward Voltage

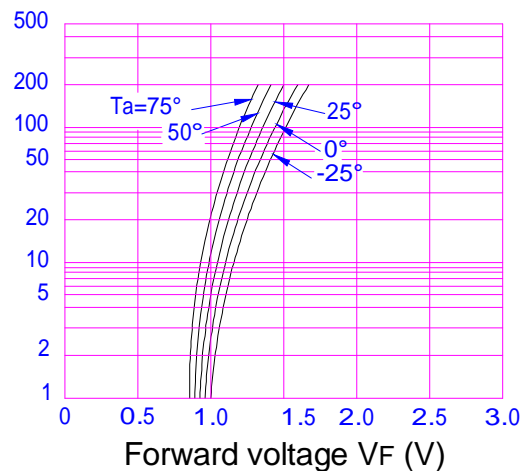


Fig.7 On-State Characteristics

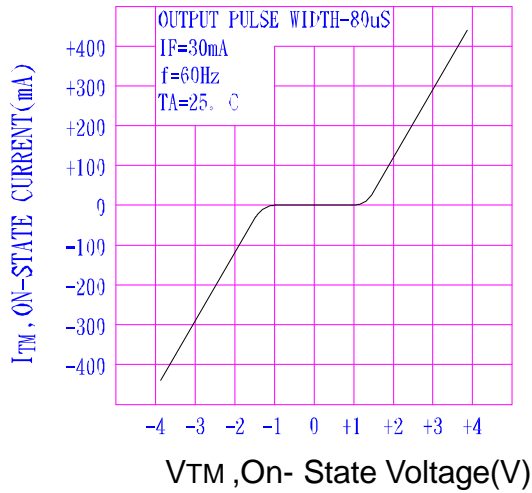


Fig.8 Inhibit Voltage vs. Temperature

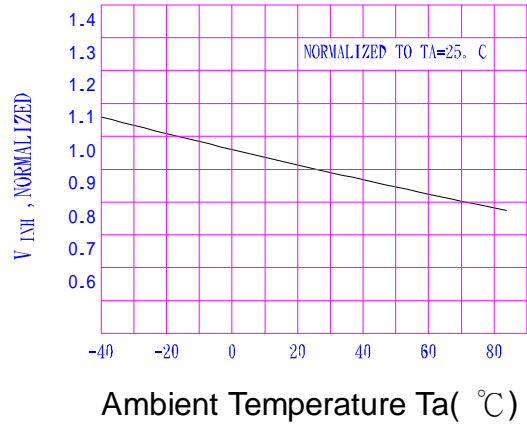


Fig.9 Leakage with LED Off vs. Temperature

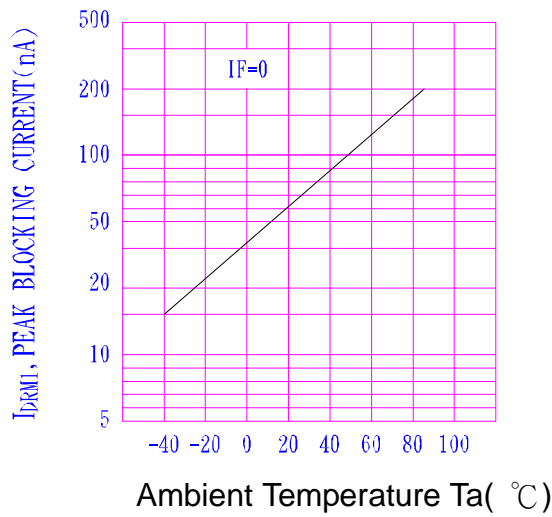


Fig.10 IDRM2, Leakage in Inhibit State vs. Temperature

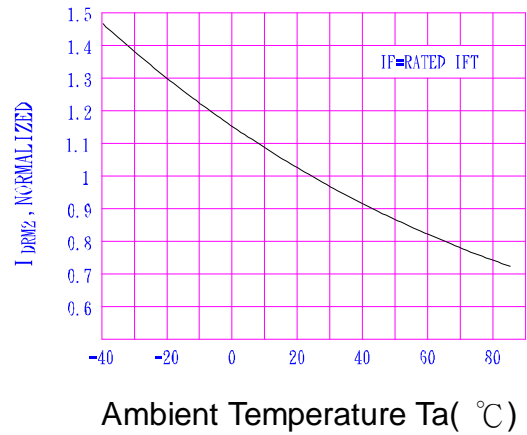


Fig.11 Trigger Current vs. Temperature

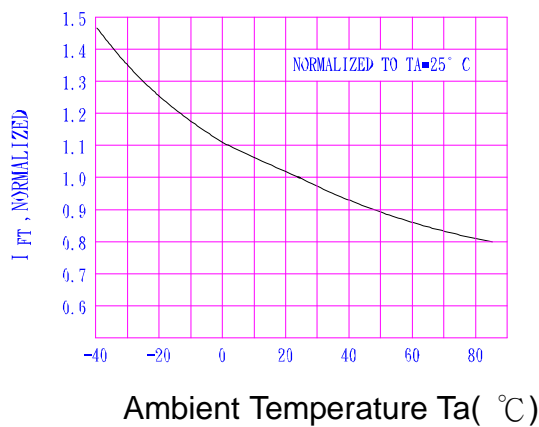


Fig.4 : 6-pin DIP type

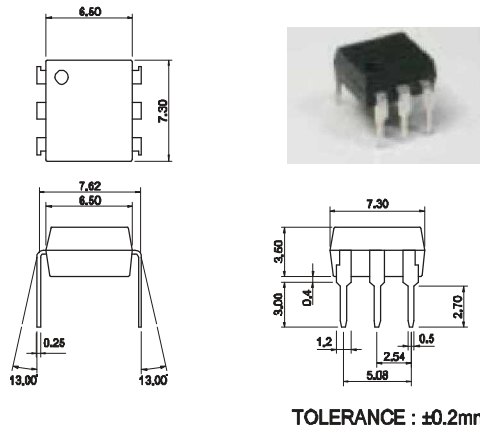


Fig.5 : 6-pin SMD type

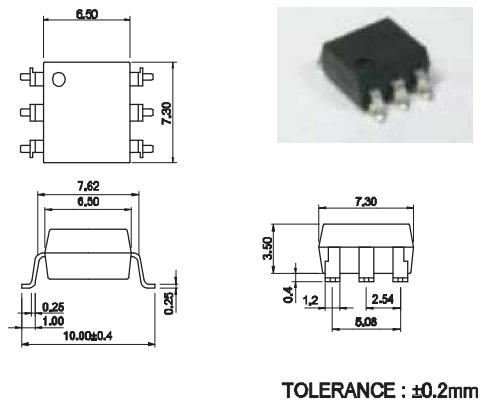


Fig.6 : 6-pin G type

