



ORIENT

Photo coupler

Product Data Sheet

Part Number: OR-MOC304X(L)/306X(L)/308X(L)

Customer: _____

Date: _____

一级代理商：

深圳市弗瑞鑫电子有限公司

地址：深圳市宝安区西乡大道302号金源商务大厦B座三楼

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- (4) High critical rate of rise of off-state voltage(dV/dt : MIN. 1000V /s)
- (5) Have Dual-in-line package;Wide lead spacing package and surface mounting package .
- (6) Operating temperature -40 °C to +110 °C
- (7) Safety approval
 - UL approved (No.E323844)
 - VDE approved(No.40029733)
 - CQC approved (No.CQC19001231480)
- (8) In compliance with RoHS, REACH standards
- (9) MSL Level 1

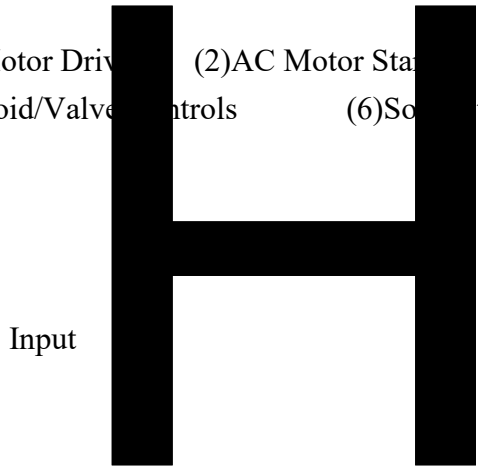
2.

The OR-MOC304X(L)/306X(L)/308X(L) series of devices each consist of a GaAs infrared emitting diode optically coupled to a monolithic silicon zero voltage crossing photo triac.They are designed for use with a discrete power triac in the interface of logic systems , such as solid-state relays, industrial controls, motors, solenoids and consumer appliances.

3.

- (1)AC Motor Drive (2)AC Motor Start (3)Static power switch (4)Lighting Controls
- (5)Solenoid/Valve controls (6)Solid state Relays (7)Temperature Controls

4.





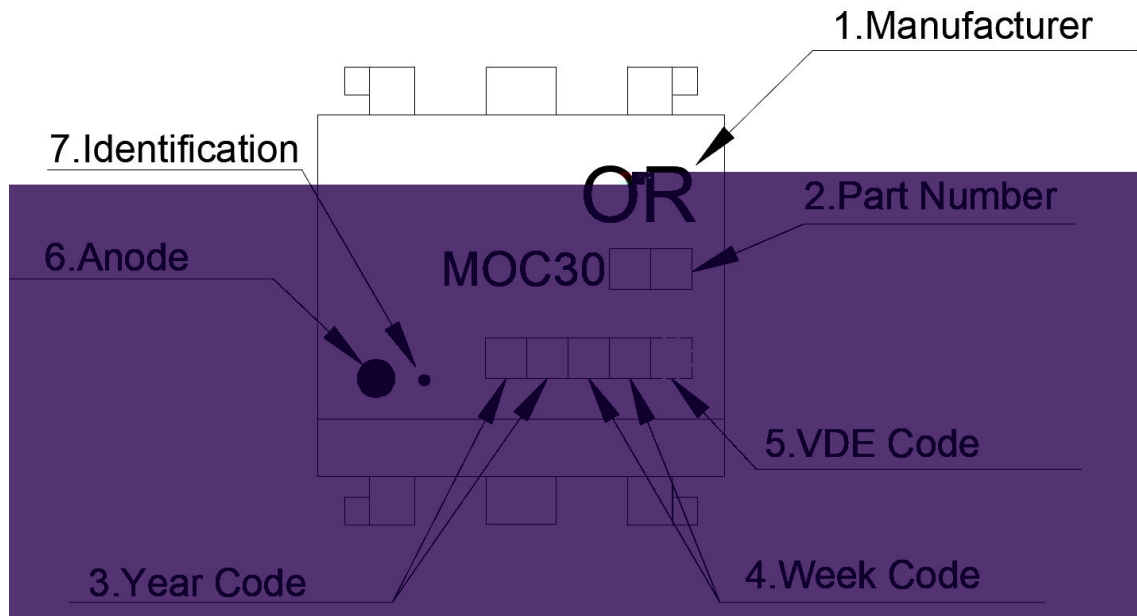
5.

Input	Forward Voltage		V_F	---	1.2	1.6	V	$I_F=20mA$					
	Reverse Current		I_R	---	---	5	μA	$V_R=6V$					
Output	1.Peak Blocking Current, Either Direction		I_{DRM}	---	---	500	nA	$V_{DRM} =$ Rated V_{DRM}					
	Peak On-State Voltage, Either Direction		V_{TM}	---	---	3.0	V	$I_{TM}=100mA$ Peak					
	2.Critical rate of Rise of Off-State Voltage		dv/dt	1000	---	---	$V/\mu s$	$V_{in}=240V_{rms}$					
Couple	3.Led Trigger Current,Current Required to Latch Output, Either Direction	OR-MOC3040 OR-MOC3060 OR-MOC3080	I_{FT}	---	---	30	mA	Main Terminal Voltage = 3V					
		OR-MOC3041 OR-MOC3061 OR-MOC3081		---	---	15							
		OR-MOC3042 OR-MOC3062 OR-MOC3082		---	---	10							
		OR-MOC3043 OR-MOC3063 OR-MOC3083		---	---	5							
		OR-MOC3044 OR-MOC3064 OR-MOC3084		---	---	3							
		Holding Current, Either Direction		I_H	---	400			---	μA			
		ZERO CROSSING		Inhibit Voltage		V_{INH}			---	5	20	Volts	$I_F = \text{Rated } I_{FT}$, MT1-MT2 Voltage above which device will not trigger.
				Leakage in Inhibited State		I_{DRM2}			---	---	500	μA	$I_F = \text{Rated } I_{FT}$, Rated V_{DRM} , Off State

with...
2. This...
3. All...
operating...
and OR-MOC3081, 10 mA for OR-MOC3042...
mA for OR-MOC3043, OR-MOC3063 and OR-MOC3083, 3 mA for OR-MOC3064 and
MOC3084, and absolute max I_F (50mA).

6.

7.



1. Manufacturer : ORIENT.

2. Part Number : MOC30 .

3. Year Code '21' means '2021' and so on.

4. Week Code 01 means the first week, 02 means the second week and so on.

5. VDE Code (Optional)

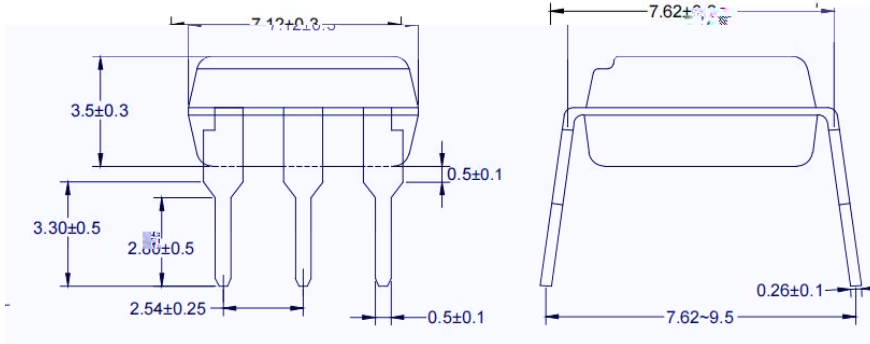
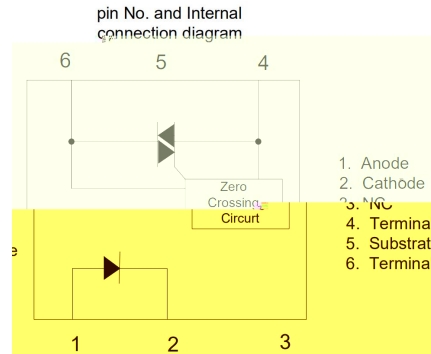
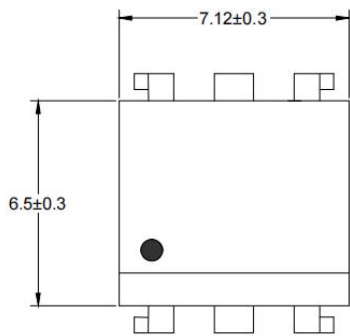
6. Anode.

7. Identification.

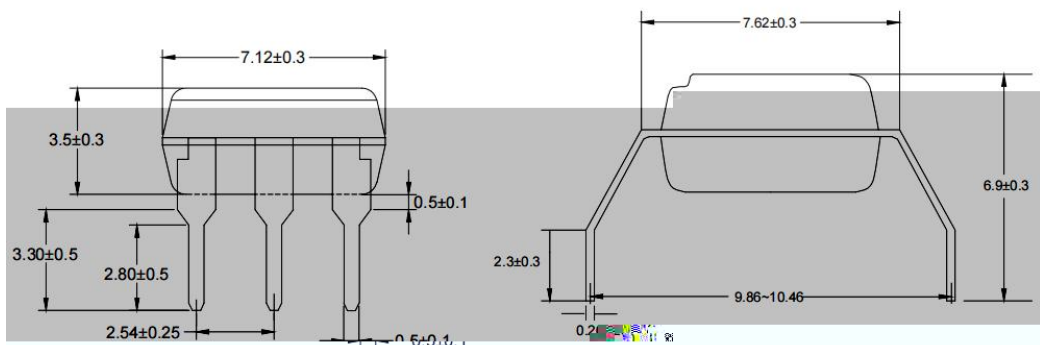
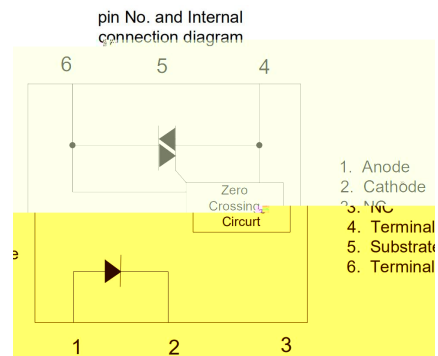
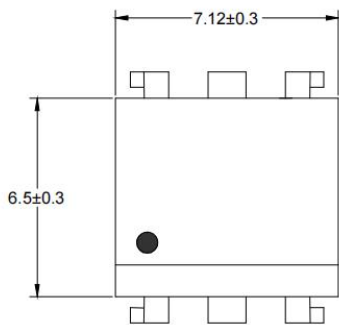
* VDE Code can be selected.

8.

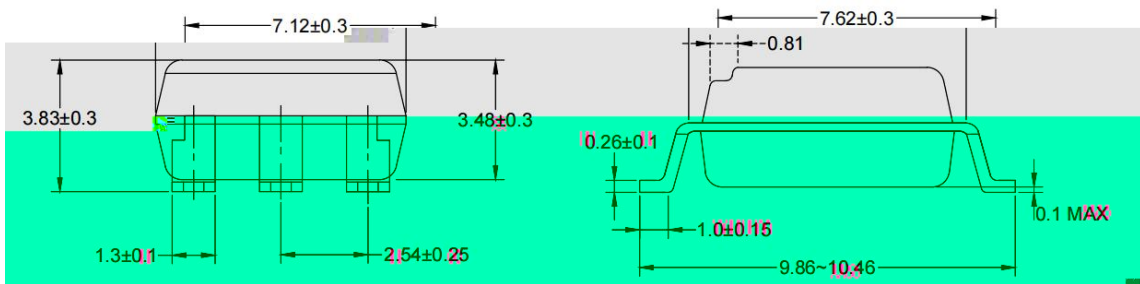
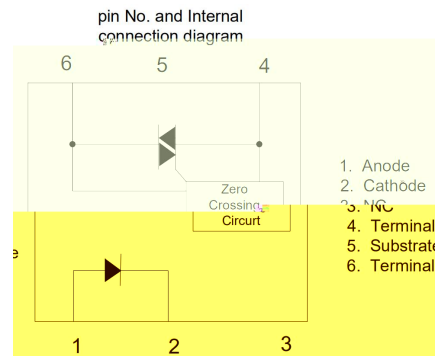
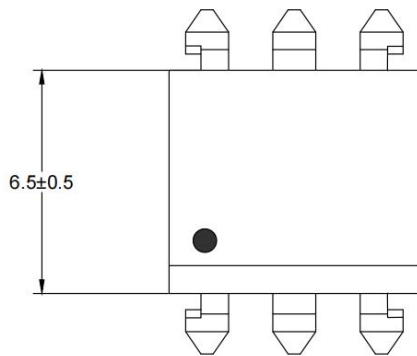
(1).MOC30XX



(2).MOC30XX M

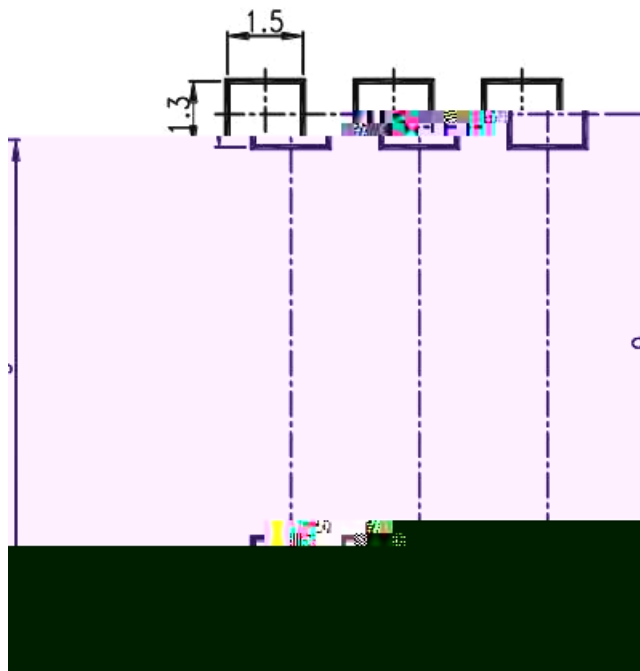


(3).MOC30XX S

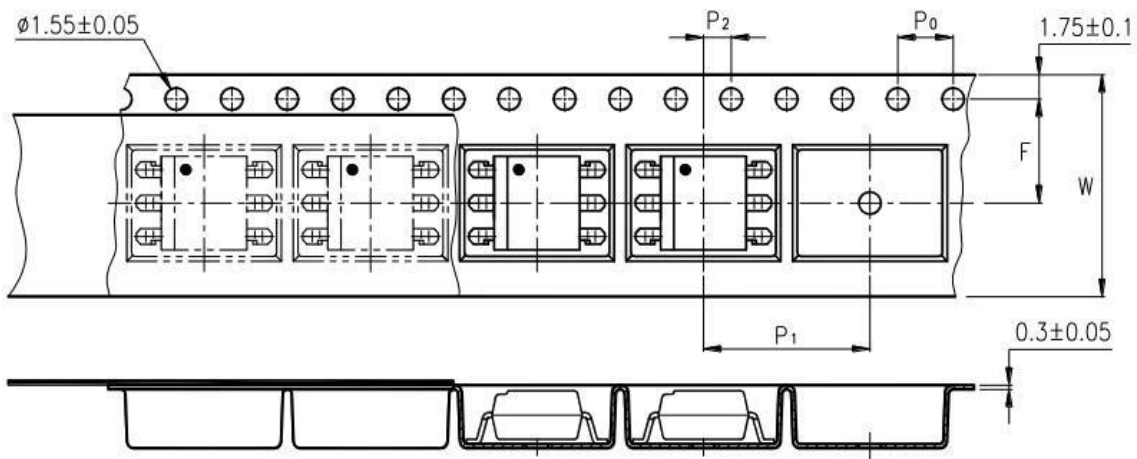
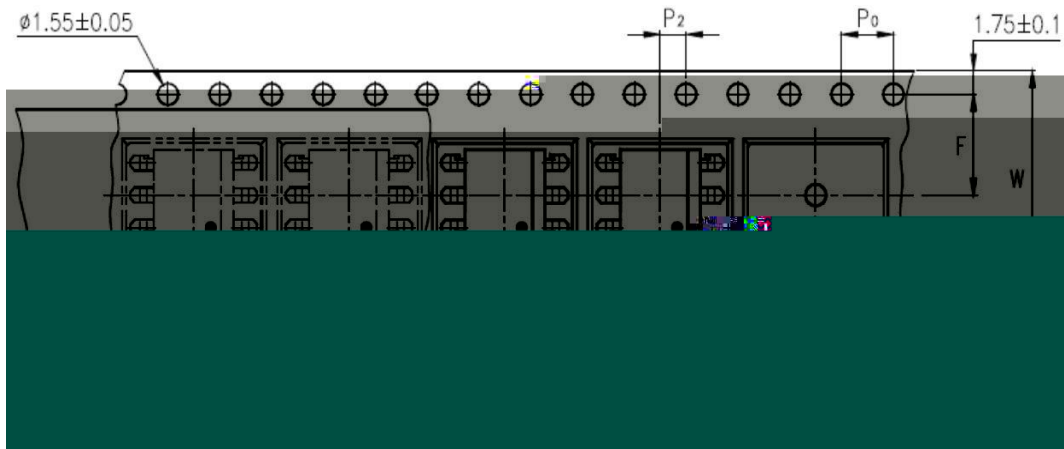


9.

Unit: mm



10.



Description	Symbol	Dimension in mm (inch)
Tape wide	W	16±0.3 (0.63)
Pitch of sprocket holes	P ₀	4±0.1 (0.15)
Distance of compartment	F	7.5±0.1 (0.295)
	P ₂	2±0.1 (0.079)
Distance of compartment to compartment	P ₁	12±0.1 (0.472)

Package Type	TA/TA1
Quantities(pcs)	1000


11.

DIP Type

Packing Information	

SOP Type

Packing Information	






ShenZhen Orient
Components Co.,LTD





Material Code : 120PCXXXXX

P/N: OR-XXXXXX

Lot No. : XXXXXX-XXXX-TX-X

D/C: XXXX

Qty: XXXX PCS


内箱码

外箱码

“XXXXXXXXXXXXXXXXXX” (一体机序列码)
Made in China

1. Material Code :Product ID.
2. P/N :Contents with "Order Information" in the specification.
3. Lot No. :Product data.
4. D/C :Product weeks.
5. Quantity :Packaging quantity.



12.

(1).IR Reflow soldering (JEDEC-STD-020C compliant)

One time soldering reflow is recommended within the condition of temperature and time profile shown below. Do not solder more than three times.

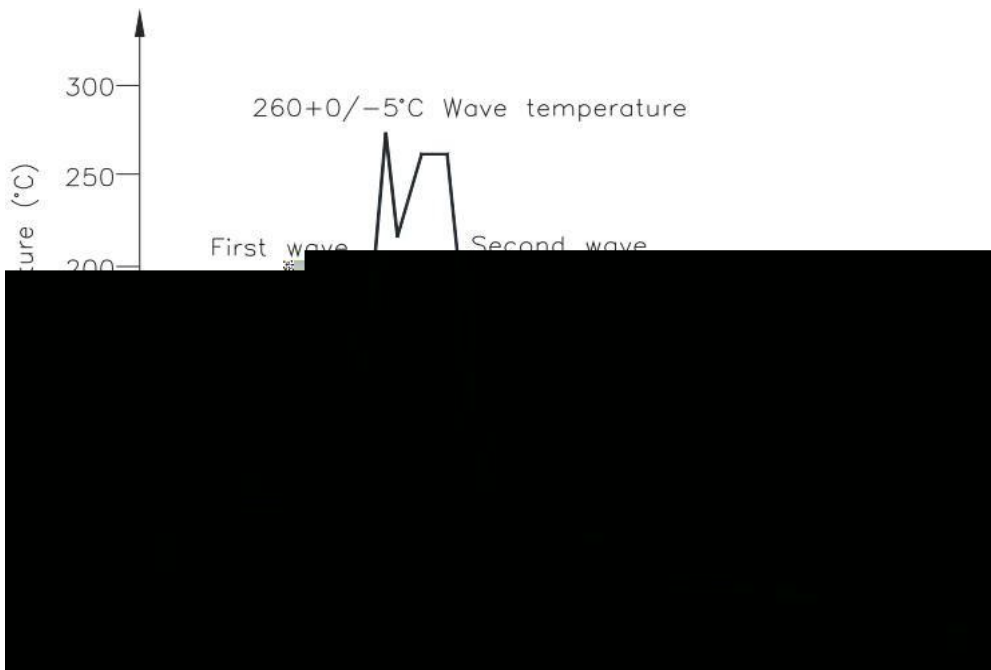
Preheat	
- Temperature Min (T Smin)	150°C
- Temperature Max (T Smax)	200°C
- Time (min to max) (ts)	90±30 sec
Soldering zone	
- Temperature (TL)	217°C
- Time (t L)	60 sec
Peak Temperature	260°C
Peak Temperature time	20 sec
Ramp-up rate	3°C / sec max.
Ramp-dow	<input type="checkbox"/>

Raw

Brand w

One time soldering is recommended within the condition of temperature.

Temperature	260+0/-5°C
Time	10 sec
Preheat temperature	5 to 140°C
Preheat time	30 to 80 sec



Allow single lead soldering in every single process. One time soldering is recommended.

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13.

Fig.1 Forward Current vs. Ambient Temperature

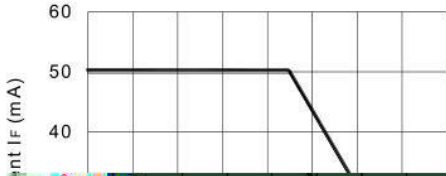


Fig.2 On-state Current vs. Ambient Temperature

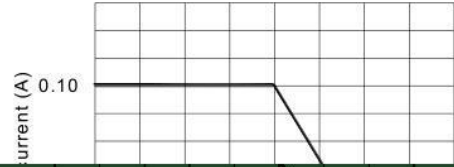


Fig.3 Minimum Trigger Current vs. Ambient Temperature

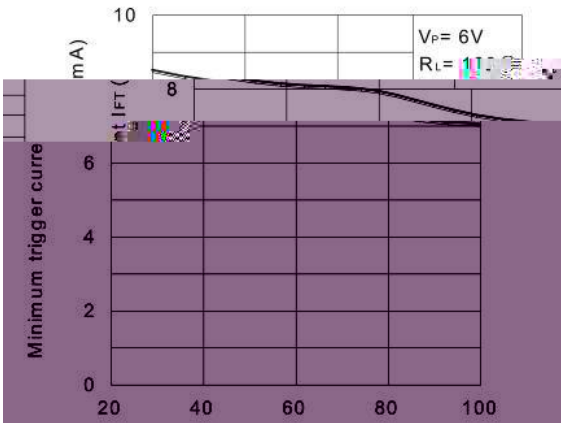


Fig.4 Forward Current vs. Forward Voltage

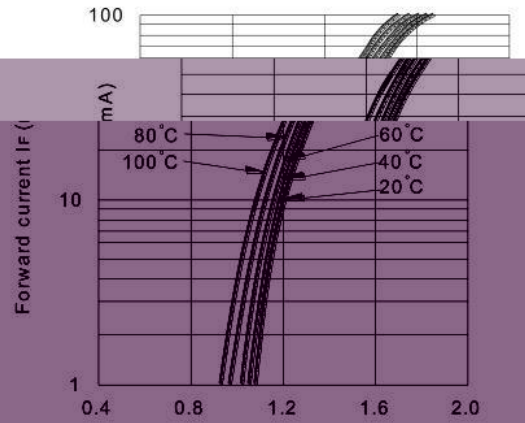


Fig.5 On-state Voltage vs. Ambient Temperature

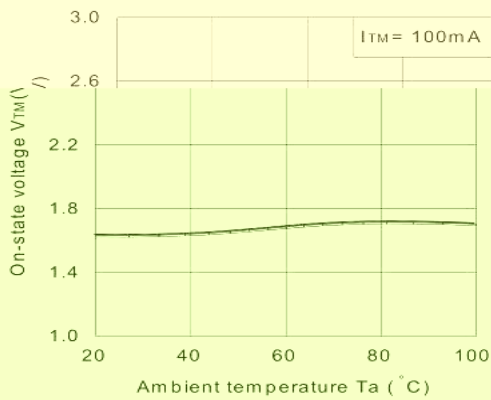


Fig.6 Holding Current vs. Ambient Temperature

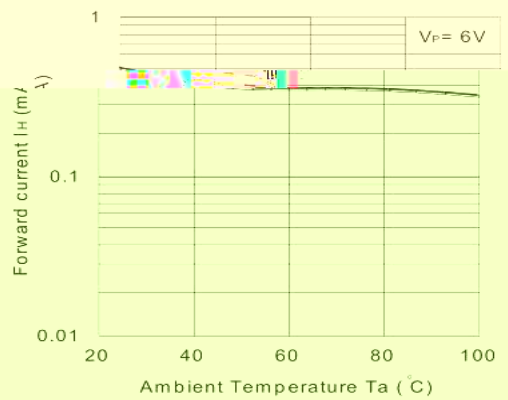


Fig.7 Repetitive Peak Off-state Current vs. Temperature

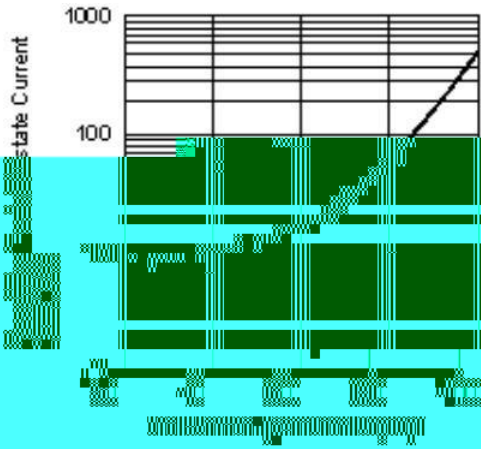


Fig.8 On-state Current vs. On-state Voltage

