

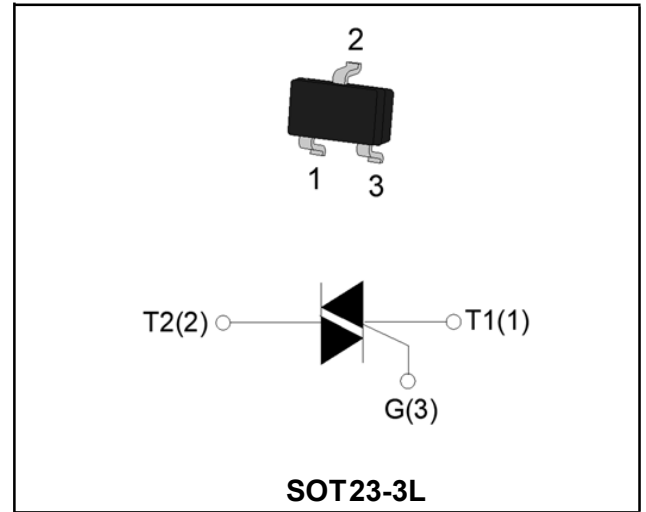
0.8A 4Quadrants TRIACs

Product Summary

Symbol	Value	Unit
$I_{T(RMS)}$	0.8	A
$V_{DRM} V_{RRM}$	600/800	V
V_{TM}	1.9	V

Features

With high ability to withstand the shock loading of large current, With high commutation performances, 4 quadrants products especially recommended for use on inductive load.



Application

Washing machine, vacuums, massager, solid state relay, AC Motor speed regulation and so on.

Absolute maximum ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive peak off-state voltage	V_{DRM}	600/800	V
Repetitive peak reverse voltage	V_{RRM}	600/800	V
RMS on-state current	$I_{T(RMS)}$	0.8	A
Non repetitive surge peak on-state current (full cycle, $F=50\text{Hz}$)	I_{TSM}	8	A
I^2t value for fusing ($t_p=10\text{ms}$)	I^2t	0.26	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$)	di/dt	I - II -III	50
		IV	10
Peak gate current	I_{GM}	1	A
Average gate power dissipation	$P_G (AV)$	0.1	W
Junction Temperature	T_J	$-40 \sim +110$	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	$-40 \sim +150$	$^{\circ}\text{C}$

Electrical characteristics (TA=25°C, unless otherwise noted)

Parameter	Symbol	Test Condition		Value		Unit
Gate trigger current	I_{GT}	$V_D=12V$ $I_T=0.1A$ $T_J=25^\circ C$	I-II-III	MAX.	5	mA
			IV		7	
Gate trigger voltage	V_{GT}		I-II-III-IV	MAX.	2.5	V
Gate non-trigger voltage	V_{GD}	$V_D = V_{DRM} T_J=125^\circ C$		MIN.	0.2	V
latching current	I_L	$V_D = 12V$ $I_{GT}=0.1A$ $T_J=25^\circ C$	I-III-IV	MAX.	10	mA
			II		15	
Holding current	I_H		I-II-III-IV	MAX.	10	mA
Critical-rate of rise of commutation voltage	dV_D/dt	$V_D=2/3V_{DRM}$ Gate Open $T_J=110^\circ C$		MIN.	25	V/us

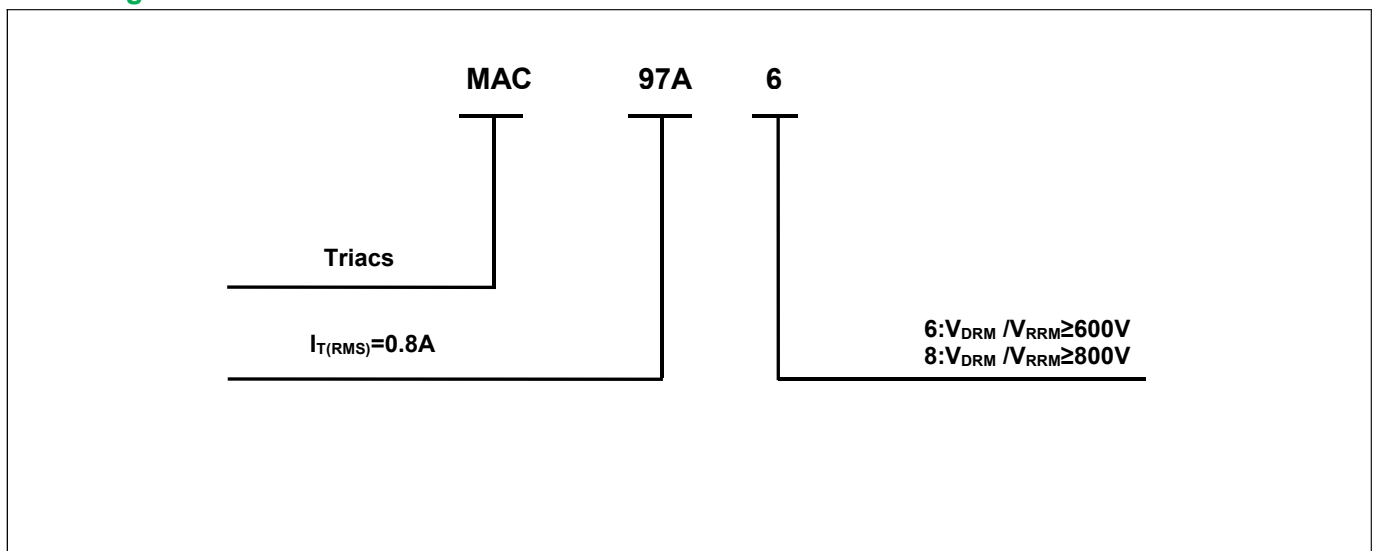
STATIC CHARACTERISTICS

Forward "on" voltage	V_{TM}	$I_{TM} = 1.85 A$ $t_p=380\mu s$		MAX.	1.9	V
Repetitive Peak Off-State Current	I_{DRM}	$V_D=V_{DRM} V_R=V_{RRM}$	$T_J=25^\circ C$	MAX.	5	UA
Repetitive Peak Reverse Current	I_{RRM}		$T_J=125^\circ C$	MAX.	100	UA

THERMAL RESISTANCES

Thermal resistance	$R_{th(j-c)}$	Junction to case(AC)	TYP.	75	$^\circ C/W$
	$R_{th(j-a)}$	Junction to ambient	TYP.	200	$^\circ C/W$

Ordering Information



Typical Characteristics

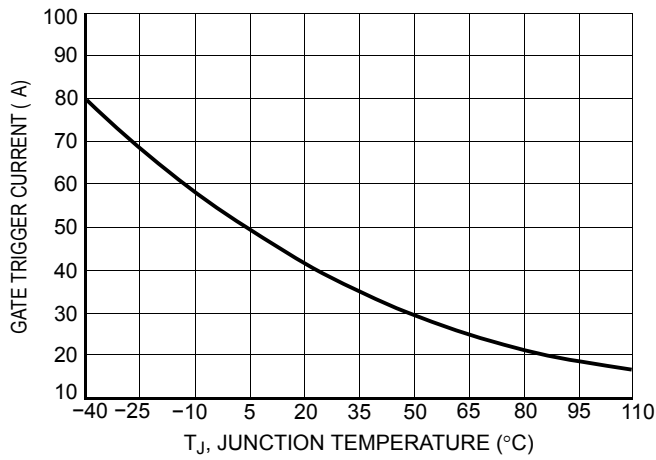


Figure 1. Typical Gate Trigger Current versus Junction Temperature

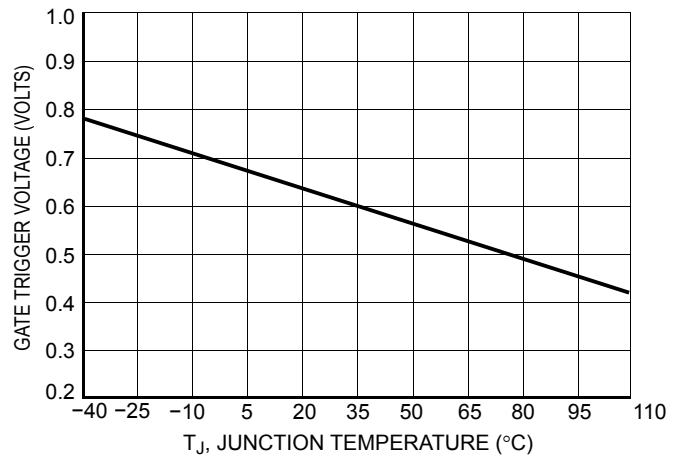


Figure 2. Typical Gate Trigger Voltage versus Junction Temperature

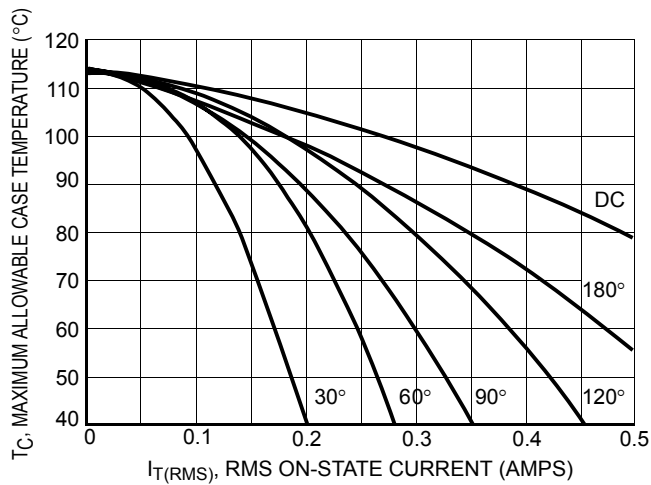


Figure 3 Typical RMS Current Derating

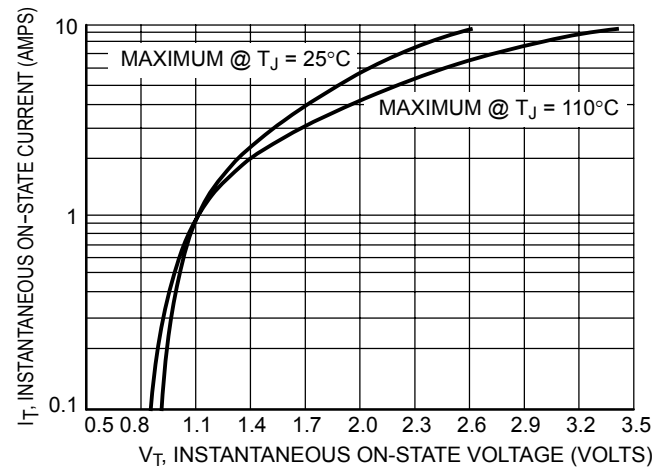


Figure 4. Typical On-State Characteristics

Ordering information

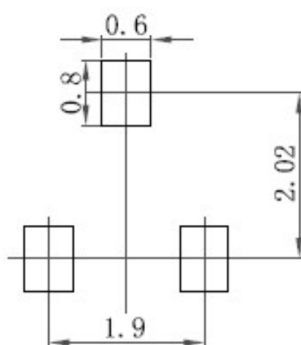
Package	Packing Description	Base Quantity	Packing Quantity
SOT23-3L	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT23-3L

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	1.05	1.25	41	49.2
A1	0.10		3.93	
A2	1.05	1.15	41	45
b	0.30	0.50	12	20
c	0.10	0.20	3.93	7.9
D	2.82	3.02	111	119
E	1.50	1.70	59	67
E1	2.65	2.95	104	116
e	0.95		37.4	
e1	1.80	2.00	71	78
L	0.30	0.066	12	26
Θ	8°			

The recommended mounting pad size



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