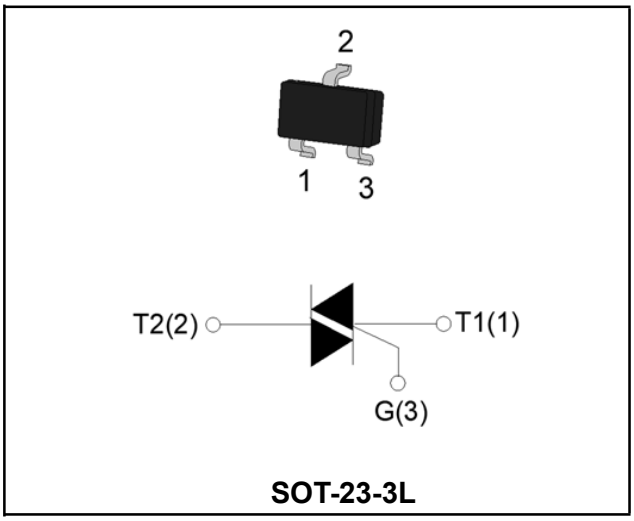
0.8A 4Quadrants TRIACs

Product Summary

Symbol	Value	Unit
$I_{T(AV)}$	0.8	A
V_{DRM} V_{RRM}	400/600	V
V_{TM}	1.9	V



SOT-23-3L

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.

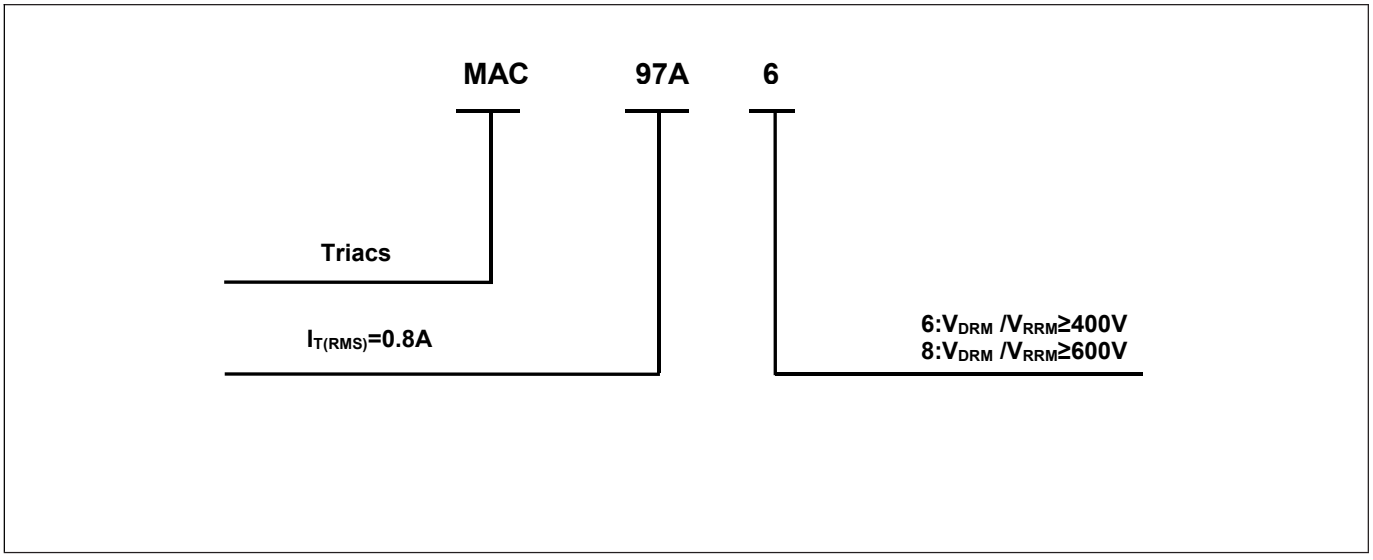
Absolute maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
Repetitive peak off-state voltage	V_{DRM}	400/600		V
Repetitive peak reverse voltage	V_{RRM}	400/600		V
RMS on-state current	$I_{T(RMS)}$	0.8		A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	8		A
I^2t value for fusing (tp=10ms)	I^2t	0.26		A^2s
Critical rate of rise of on-state current (I_G =2 x I_{GT})	dI/dt	I - II -III	50	A
		IV	10	A/ps
Peak gate current	I_{GM}	1		A
Average gate power dissipation	$P_{G(AV)}$	0.1		W
Junction Temperature	T_J	-40~ +110		°C
Storage Temperature	T_{STG}	-40 ~+150		°C

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

Parameter	Symbol	Test Condition		Value		Unit
Gate trigger current	I_{GT}	V_D=12V I_T=0.1A Tj=25°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} Tj=125°C		MIN.	0.2	V
latching current	I_L	V_D =12V I_{GT}=0.1A Tj=25°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 Tj=110°C		MIN.	25	V/us
STATIC CHARACTERISTICS						
Forward "on" voltage	V_{TM}	I_{TM} =1.85A tp=380us		MAX.	1.9	V
Repetitive Peak Off-State Current	I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25°C	MAX.	5	UA
Repetitive Peak Reverse Current	I_{RRM}		T_j=125°C	MAX.	100	UA
THERMAL RESISTANCES						
Thermal resistance	Rth(j-c)	Junction to case(AC)		TYP.	75	°C/W
	Rth(j-a)	Junction to ambient		TYP.	200	°C/W

Ordering Information



Typical Characteristics

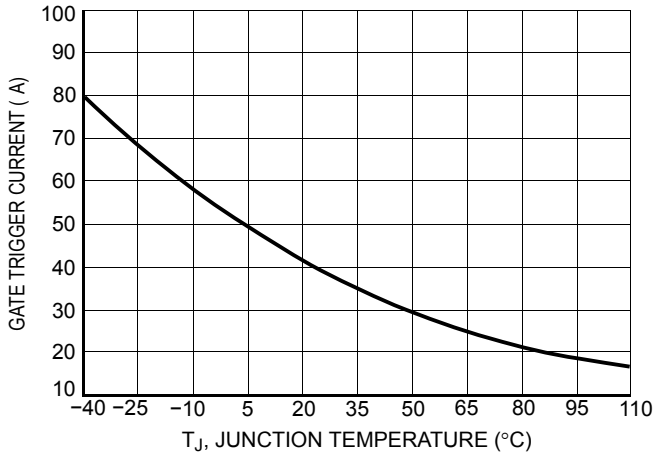


Figure 1. Typical Gate Trigger Current versus Junction Temperature

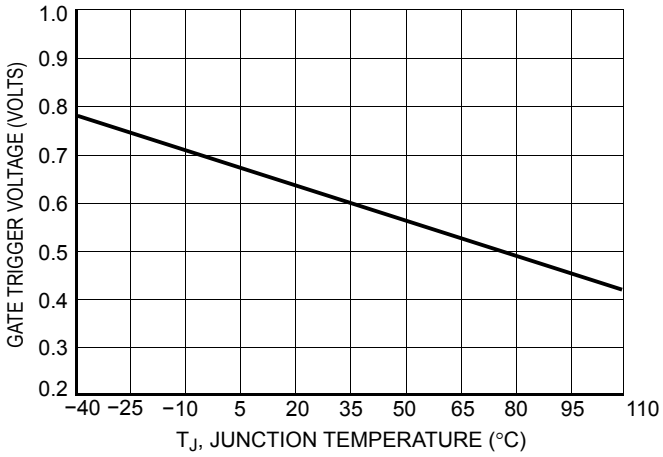


Figure 2. Typical Gate Trigger Voltage versus Junction Temperature

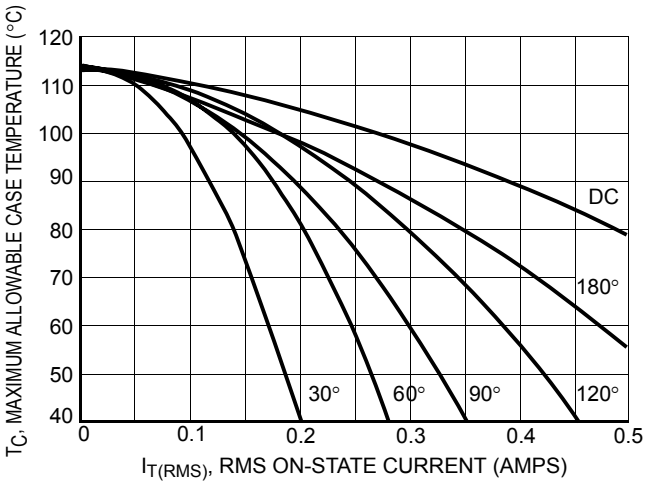


Figure 3 Typical RMS Current Derating

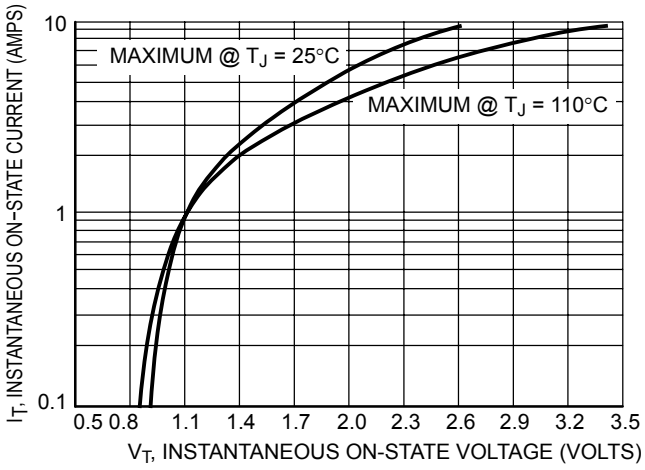


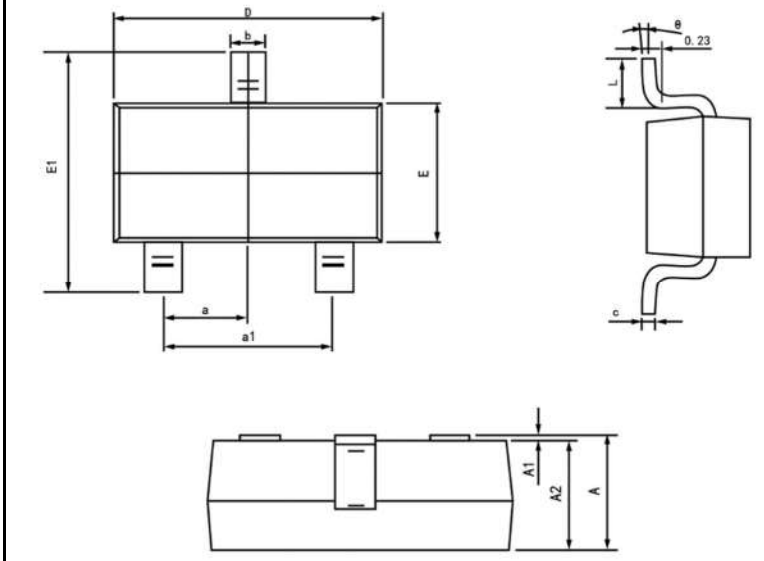
Figure 4. Typical On−State Characteristics

Ordering information

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

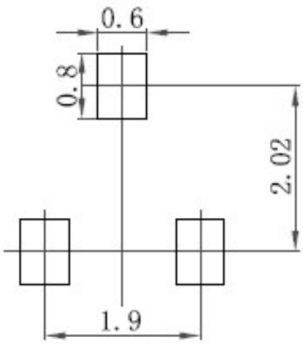
Package Dimensions

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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