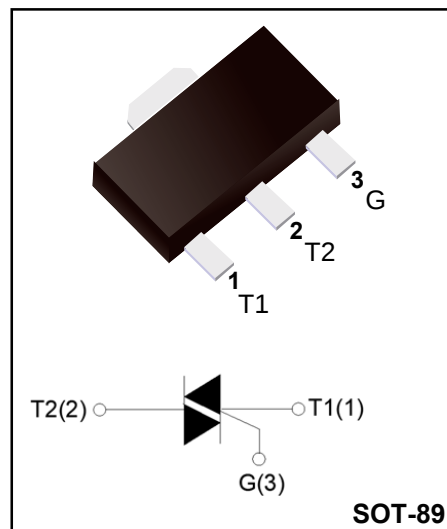


0.6A 4Quadrants TRIACs

Product Summary

Symbol	Value	Unit
$I_{T(RMS)}$	0.6	A
$V_{DRM} V_{RRM}$	400	V
V_{TM}	1.7	V



Reverse Blocking Thyristors

- ◆ Sensitive Gate
- ◆ Silicon Controlled Rectifiers General Description

Marking Code

MAC97A6	97A6
---------	------

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive peak off-state voltage	V_{DRM}	400	
Repetitive peak reverse voltage	V_{RRM}	400	V
RMS on-state current	$I_{T(RMS)}$	0.6	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	8	A
I^2t value for fusing ($t_p=10\text{ms}$)	I^2t	0.3	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	$-40 \sim +125$	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	$-40 \sim +150$	$^{\circ}\text{C}$

Electrical Characteristics(T_A=25°C)

Parameter	Symbol	Test Condition		Value	Unit
Gate trigger current	I _{GT}	V _D =12V, I _T =0.1A T _j =25°C	I - II -III	5	mA
			IV	10	
Gate trigger voltage	V _{GT}	I - II -III-IV		1.2	V
Non-triggering gate voltage	V _{GD}	V _D =V _{DRM} T _j =125°C		0.2	V
Latching current	I _L	V _D =12V, I _T =0.06A T _j =25°C	I - II -III	10	mA
			II	15	
Holding current	I _H	I - II -III-IV		10	mA
Critical-rate of rise of commutation voltage	dV/dt	V _D =2/3 V _{DRM} Gate Open T _j =125°C		30	V/μs

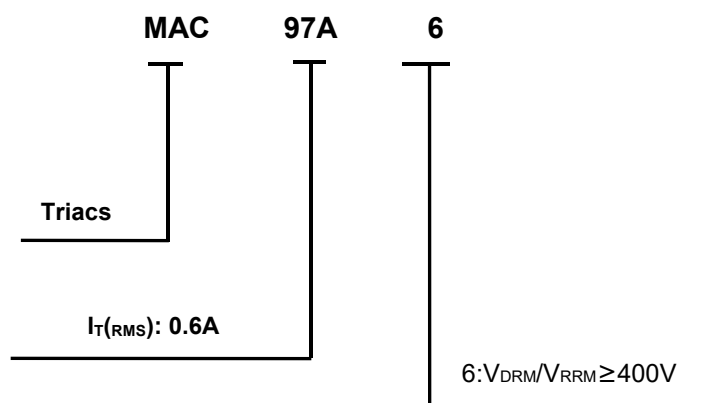
STATIC CHARACTERISTICS

On-state Voltage	V _{TM}	I _{TM} =0.85A tp=380μs		1.7	V
Repetitive Peak Off-State Current	I _{DRM}	V _D =V _{DRM} = V _{R RM}	T _j =25°C	20	μA
Repetitive Peak Reverse Current	I _{RRM}		T _j =125°C	100	μA

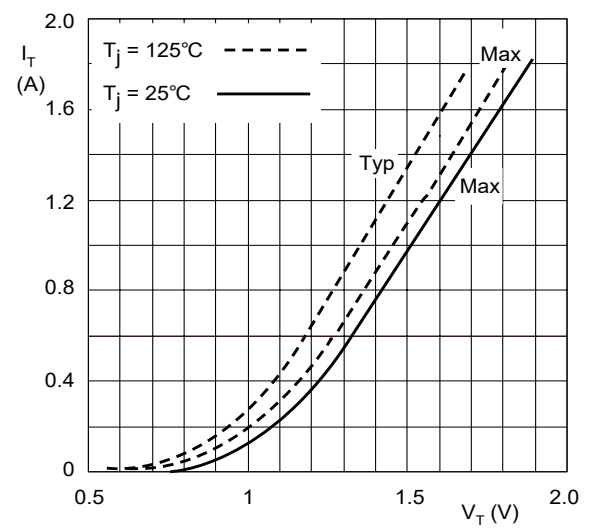
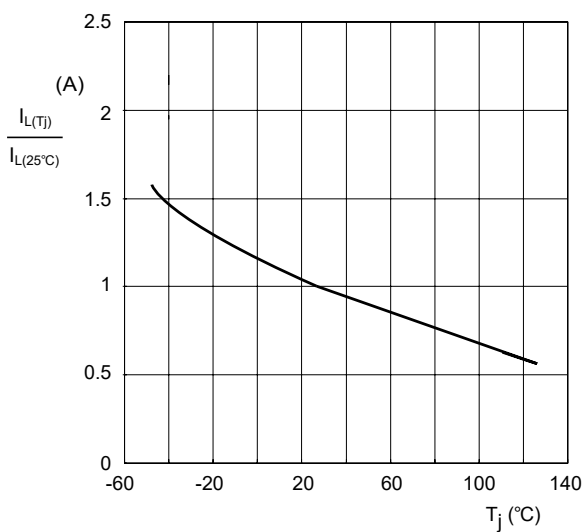
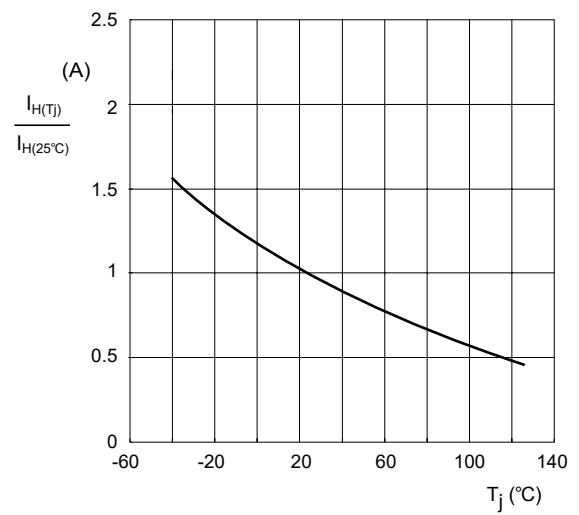
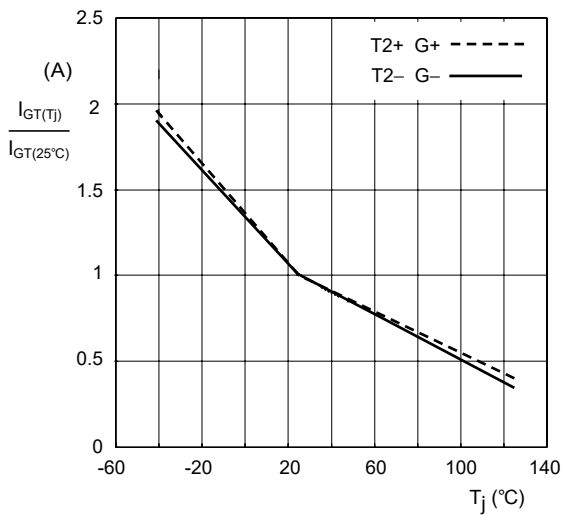
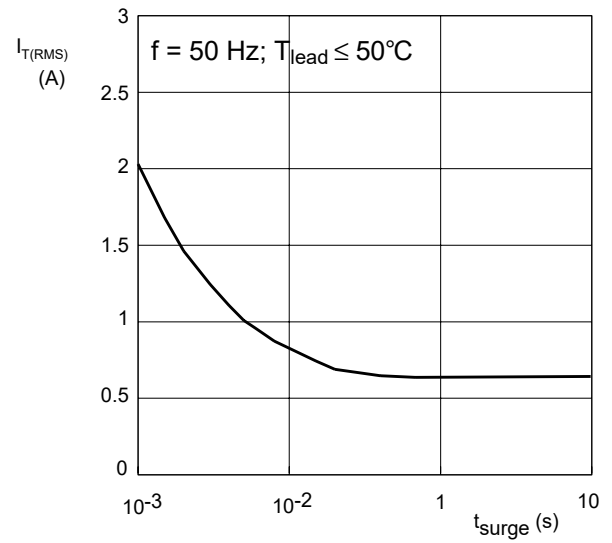
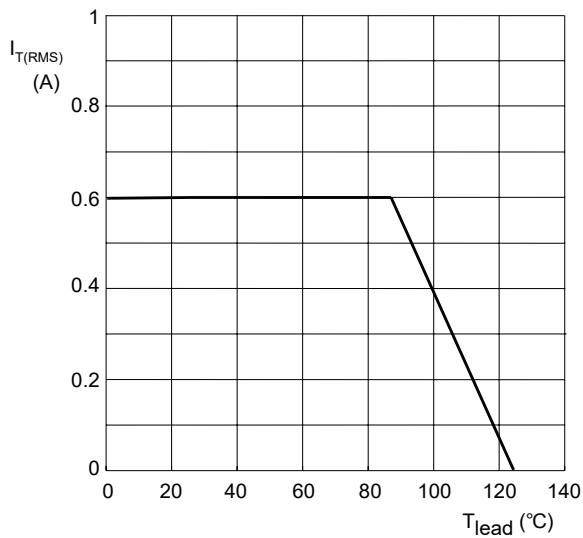
THERMAL RESISTANCES

lhermal resistance	R _{th (j-c)}	Junction to case(AC)	TYP.	60	°C/W
	R _{th (j-a)}	Junction to ambient	TYP.	150	°C/W

Ordering Information



Typical Characteristics



Ordering information

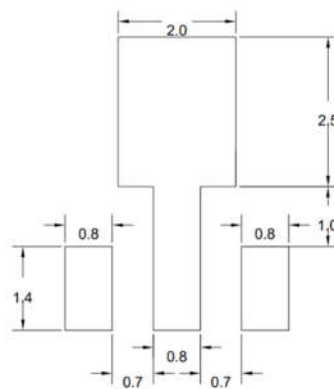
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.