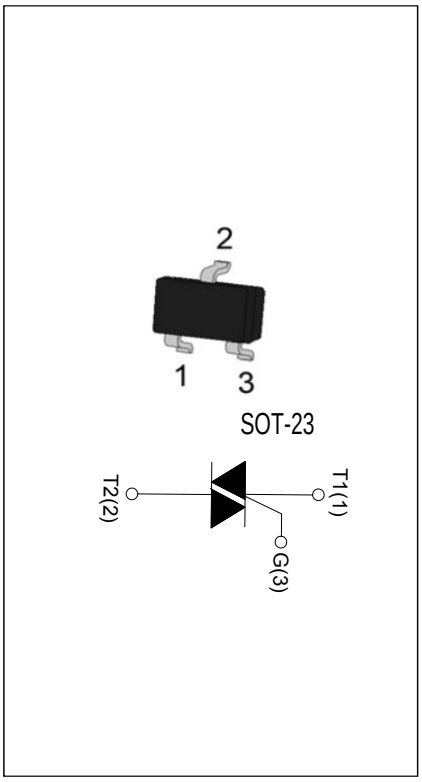
97A8

MAIN FEATURES 4Q TRIAC

Symbol	Value	Unit
$I_{T(RMS)}$	1	A
V_{DRM} /V_{RRM}	800	V
$I_{GT1/2/3}$	5/5/5/10	mA



DESCRIPTION:

The 97A8 triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Package SOT-23 is RoHS compliant.

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	℃
Operating junction temperature range	T_j	-40-125	℃
Repetitive peak off-state voltage (T_j=25℃)	V_{DRM}	800	V
Repetitive peak reverse voltage (T_j=25℃)	V_{RRM}	800	V
RMS on-state current (T_C≤90℃)	$I_{T(RMS)}$	1	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25℃)	I_{TSM}	10	A
I^2t value for fusing (t_p=10ms , T_j=25℃)	I^2t	0.41	A^2s
Critical rate of rise of on-state current (T_j=125℃)	dI/dt	50	A/μs
Peak gate current (t_p=20μs , T_j=125℃)	I_{GM}	1	A
Average gate power dissipation (T_j=125℃)	$P_{G(AV)}$	0.1	W

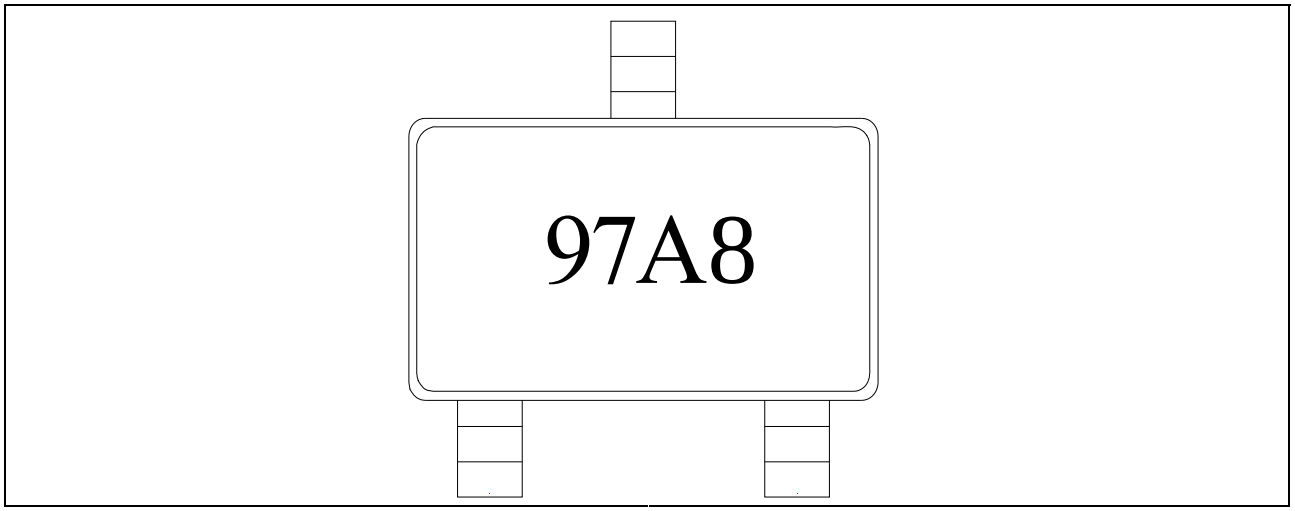
ELECTRICAL CHARACTERISTICS (T_j=25℃ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =100Ω	Ⅰ-Ⅱ-Ⅲ	MAX.	5	mA
		Ⅳ		10	
V_{GT}		ALL	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j =125℃ R_L =100Ω	ALL	MIN.	0.2	V
I_L	I_G =1.2I_{GT}	Ⅰ-Ⅲ-Ⅳ	MAX.	5	mA
		Ⅱ		20	
I_H	I_T =500mA		MAX.	8	mA
dV/dt	V_D=2/3V_{DRM} T_j =125℃		MIN.	50	V/μs

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =32A	T_j=25℃	1.30	V
V_{TO}	Threshold voltage	T_j=125℃	0.98	V
R_D	Dynamic resistance	T_j=125℃	362	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25℃	5	μA
I_{RRM}		T_j=125℃	0.15	mA

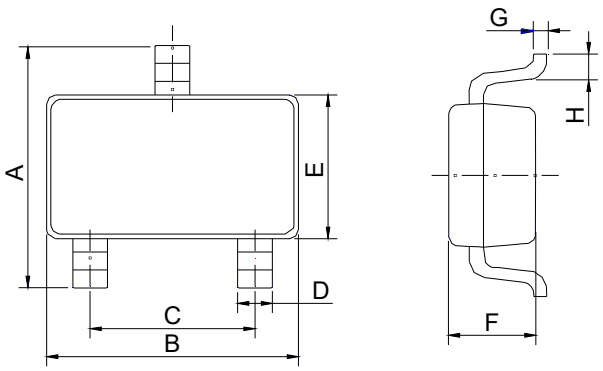
MARKING



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		Ⅰ-Ⅱ-Ⅲ	Ⅳ			
97A8	800	5	10	SOT-23	3000	REEL

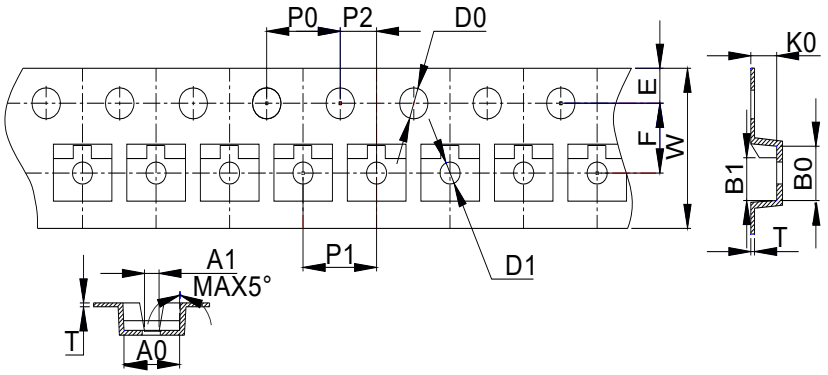
PACKAGE MECHANICAL DATA



SOT-23

Ref.	Dimensions		
	Millimeters		
	Min.	Typ.	Max.
A	2.65	2.80	2.95
B	2.82	2.92	3.02
C	1.80	1.90	2.00
D	0.30	0.35	0.40
E	1.50	1.60	1.70
F	1.07	1.17	1.27
G	0.05	0.15	0.25
H	0.25	0.40	0.55

DELIVERY MODE



Ref.	Dimensions Millimeters		
	Min.	Typ.	Max.
A0	3.10	3.20	3.30
A1	1.02	1.04	1.06
B0	3.18	3.28	3.38
B1	2.39	2.49	2.59
K0	1.22	1.32	1.42
P0	3.90	4.00	4.10
P1	3.90	4.00	4.10
P2	1.95	2.00	2.05
T	0.15	0.20	0.25
E	1.65	1.75	1.85
F	3.45	3.50	3.55
D0	1.50	1.55	1.60
D1	1.00	1.10	1.20
W	7.90	8.00	8.20

PACKAGE	OUTLINE	TUBE (PCS)
97A8	REEL	3000

FIG.1 Maximum power dissipation versus RMS on-state current

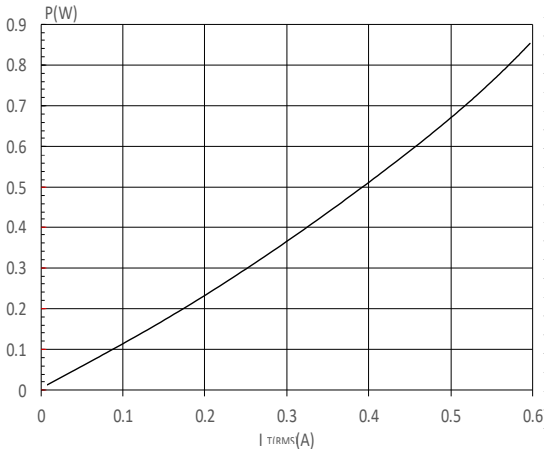


FIG.2: RMS on-state current versus case temperature

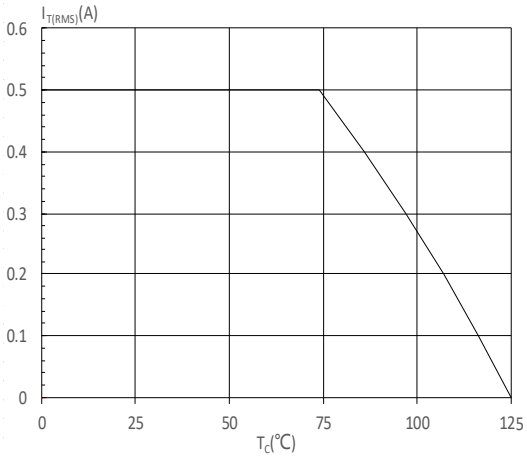


FIG.3: Surge peak on-state current versus number of cycles

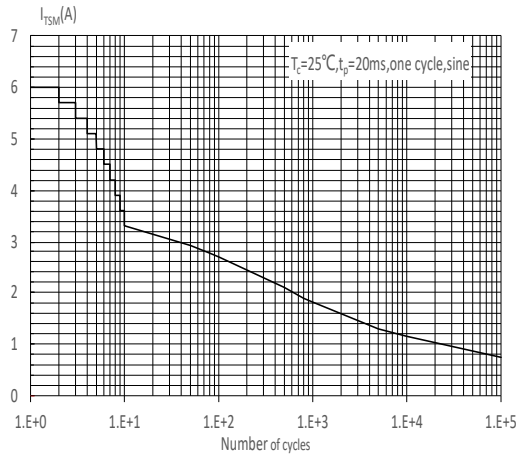


FIG.4: On-state characteristics

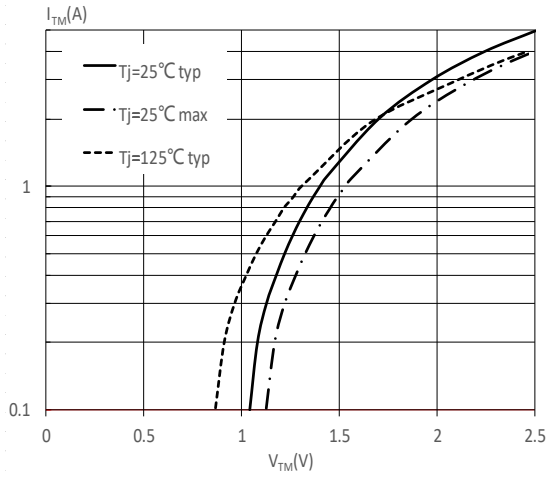


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width t_p<20ms, and corresponding value of I^2t
(Ⅰ-Ⅱ: dI/dt<50A/μs;Ⅲ-Ⅳ: dI/dt<20A/μs)

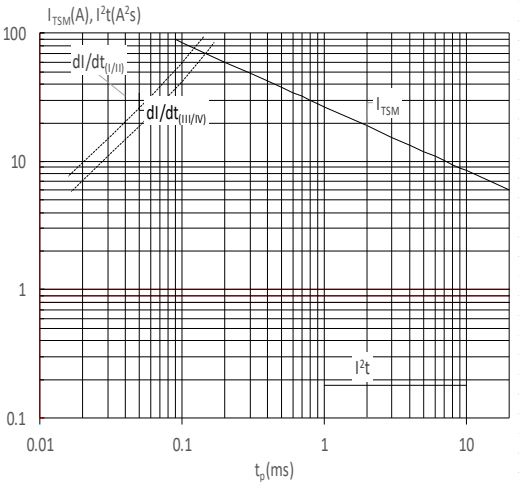
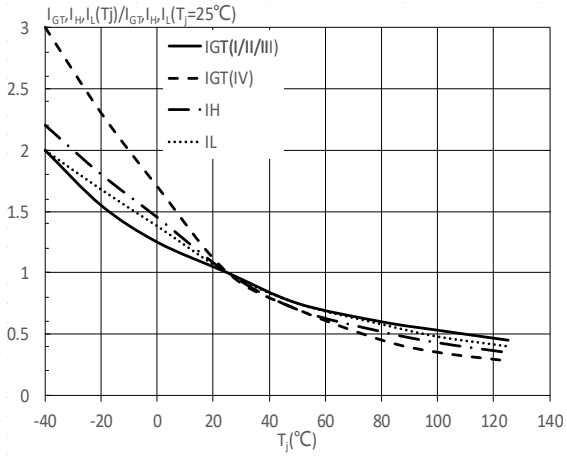


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



单击下面可查看定价，库存，交付和生命周期等信息

>>ZG(中鑫半导体)