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SEMICONDUCTOR



ESD



TVS



TSS



MOV

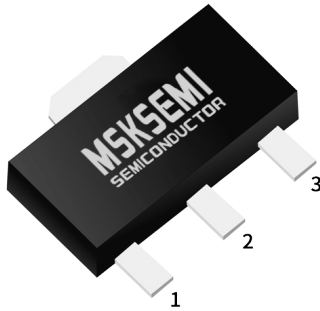


GDT



PLED

Product data sheet



SOT-89

Package	Pin assignment		
	1	2	3
All	T1	T2	G

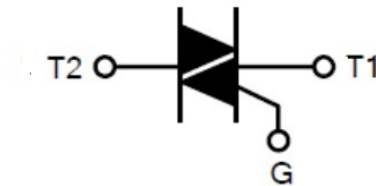
FEATURES

This device of sensitive TRIAC product is a glass passivated device, has a low gate trigger current, high stability in gate trigger current to variation of operating temperature and high off state voltage.

APPLICATIONS

This device is suitable for low power AC switching application, phase control application such as fan speed and temperature modulation control, lighting control and static switching relay.

SYMBOL:



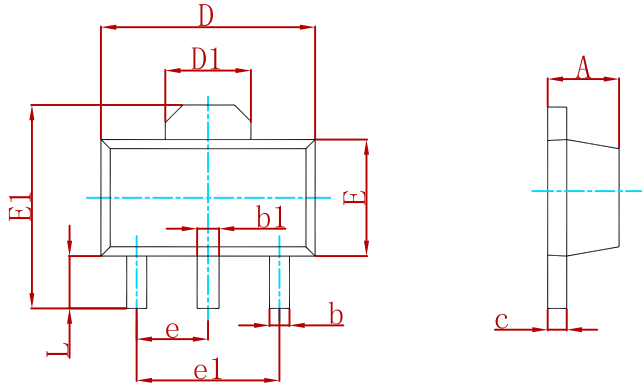
ABSOLUTE MAXIMUM RATINGS (T_J=25°C)

PARAMETER	SYMBOL	VALUE	UNIT	
Repetitive Peak Off-State Voltages	V _{DRM} , V _{RRM}	600	V	
RMS on-State Current	I _{T(RMS)}	2	A	
Non-Repetitive Peak On-State Current	I _{TSM}	20	A	
I ² t for fusing	I ² t	2.6	A ² s	
Repetitive rate of rise of on-state current after triggering	dI _T /dt	I	50	A/μs
		II	50	
		III	50	
		IV	10	
Peak gate current	I _{GM}	1.8	A	
Peak Gate Power	P _{GM}	4	W	
Average Gate Power	P _{G(AV)}	0.5	W	
Operating junction temperature	T _J	+125	°C	
Storage Temperature	T _{STG}	-40 ~ +150	°C	

ELECTRICAL CHARACTERISTICS (T_J=25°C)

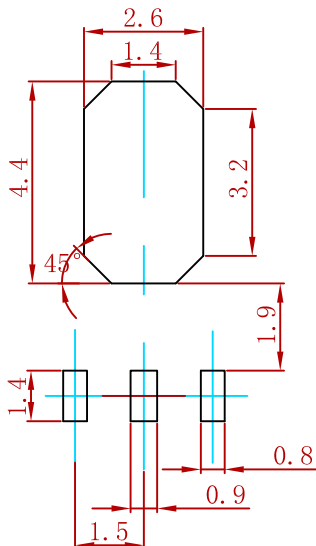
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I _{DRM} I _{RRM}	V _{AK} = Rated V _{DRM} or V _{RRM} ;		10	uA
Gate Trigger Current	I _{GT}	V _D =12V, R _L =100Ω	I	10	mA
			II	10	
			III	10	
			IV	25	
Gate Trigger Voltage	V _{GT}	V _D =12V, I _T =100mA		1.5	V
Peak Forward On-State Voltage	V _{TM}	I _T =4.0A,		1.7	V
Latch Current	I _L	V _D =12V I _G =0.1A,	I	15	mA
			II	15	
			III	15	
			IV	20	
Holding Current	I _H	V _D =12V ,I _G =0.1A		15	mA
Gate Non-Trigger Voltage	V _{GD}	V _D =V _{DRM}	0.2		V
Critical Rate of Rise of Off-State Voltage	dV/dt	V _D =67%V _{DRM} , R _{GK} =1kΩ,	20		V/μs

PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047

Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
BT131-600-MS	SOT-89	1000

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