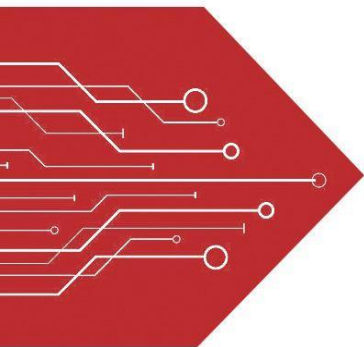


MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV

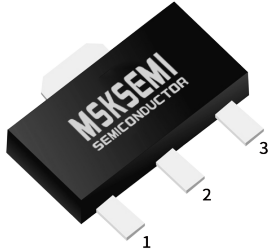


GDT



PLED

Product data sheet



SOT-89

FEATURES

- Sensitive Gate Trigger Current
- Low Reverse and Forward Blocking Current
- Low Holding Current
- Glass-Passivated Surface for Reliability and Uniformity

APPLICATIONS

- Ignition circuits
- Lighting ballasts
- Protection circuits
- Switched Mode Power Supplies

Package	Pin assignment		
	1	2	3
SOT-89	G	A	K

SYMBOL



ABSOLUTE MAXIMUM RATINGS

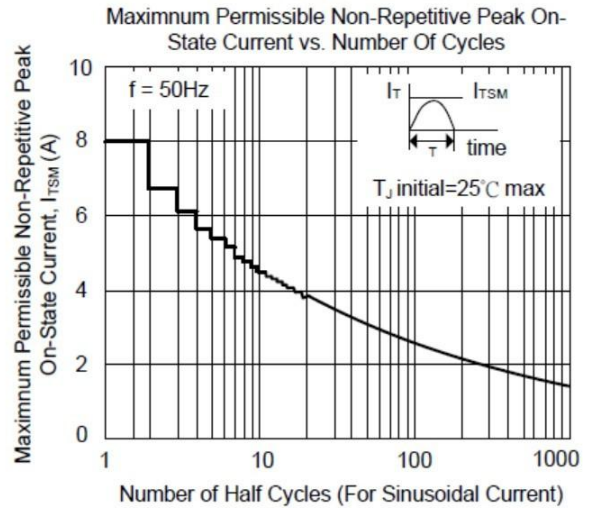
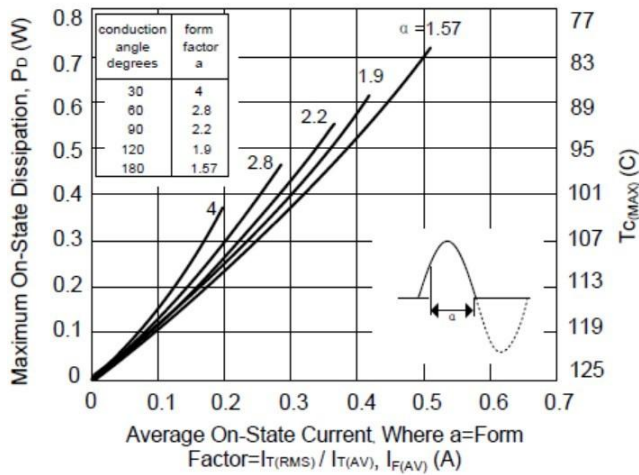
PARAMETER	SYMBOL	VALUE		UNIT
Repetitive Peak Off-State Voltages	V_{DRM} V_{RRM}	BT169-MS	600	V
Average On-State Current	$I_{T(AV)}$	0.5		A
RMS on-State Current	$I_{T(RMS)}$	0.8		A
Non-Repetitive Peak On-State Current	I_{TSM}	8		A
Peak gate current	I_{GM}	1.0		A
Peak Gate Power	$P_{G(AV)}$	0.1		W
Peak Gate Voltage	P_{GM}	2		W
Operating junction temperature	T_J	-40~+125		°C
Storage Temperature	T_{STG}	-40~+150		°C

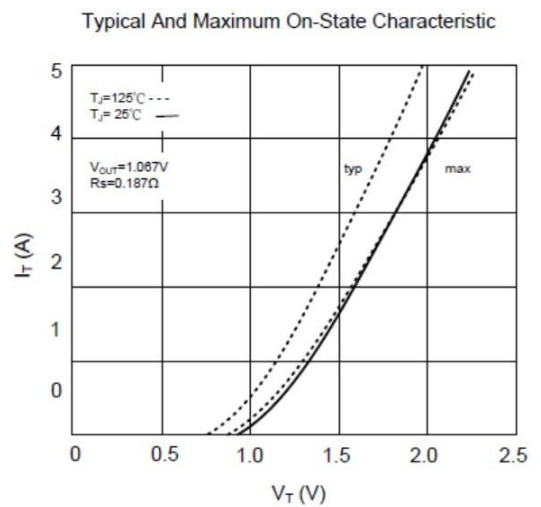
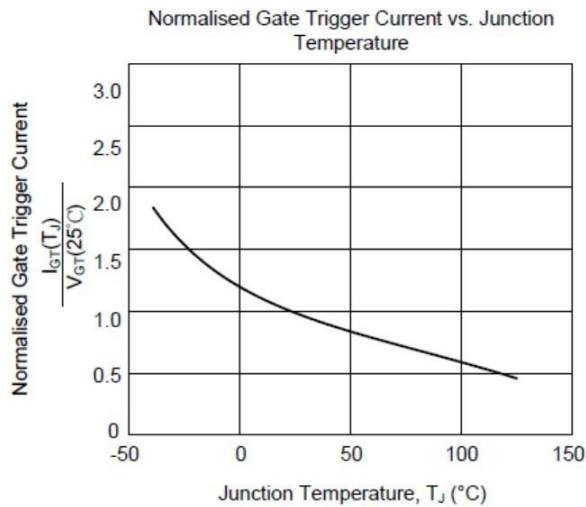
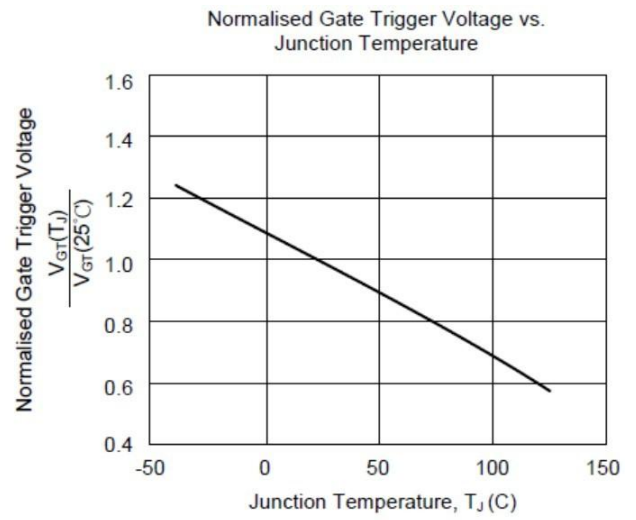
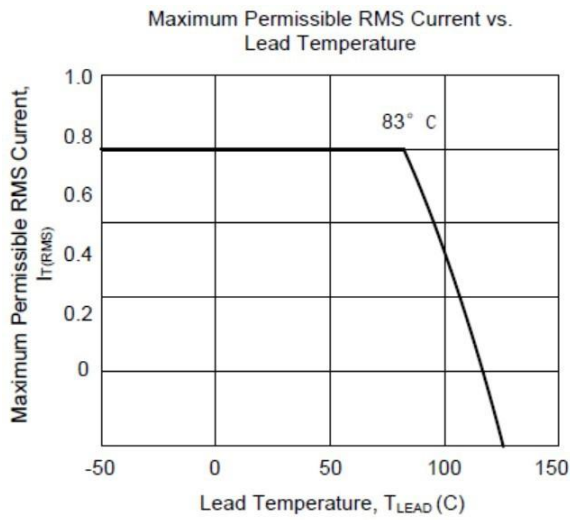
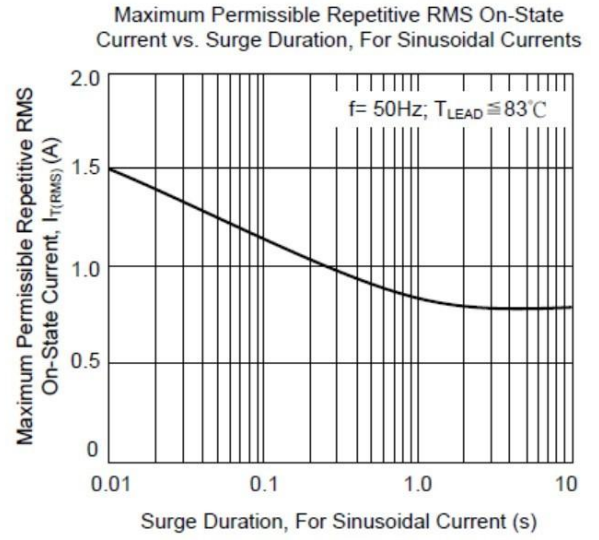
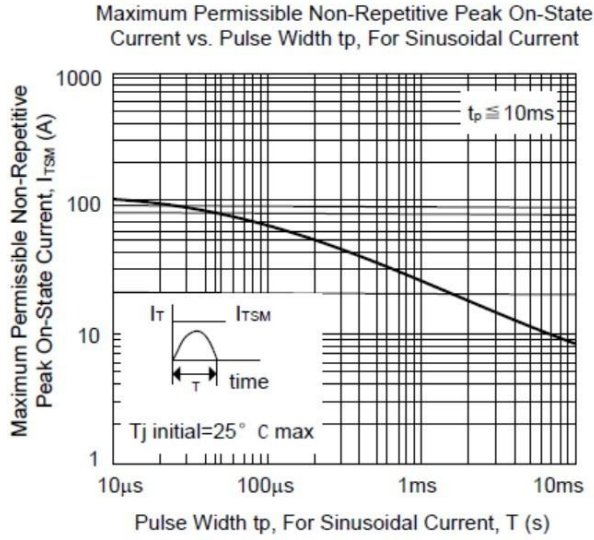
ELECTRICAL CHARACTERISTIC CURVE (T_J=25°C)

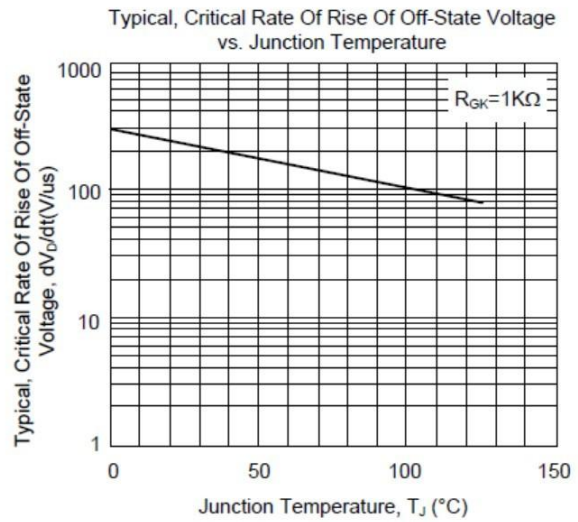
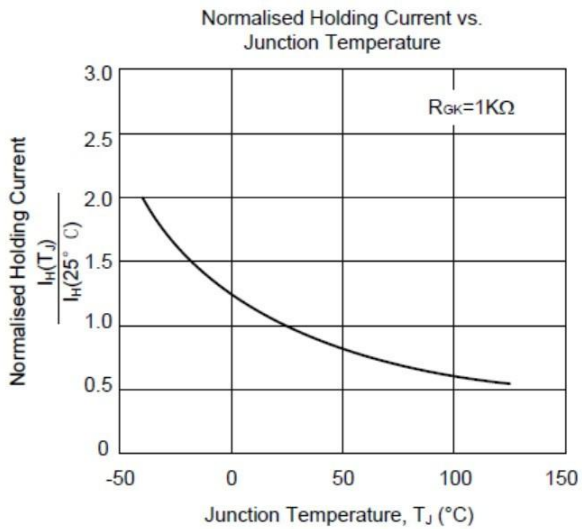
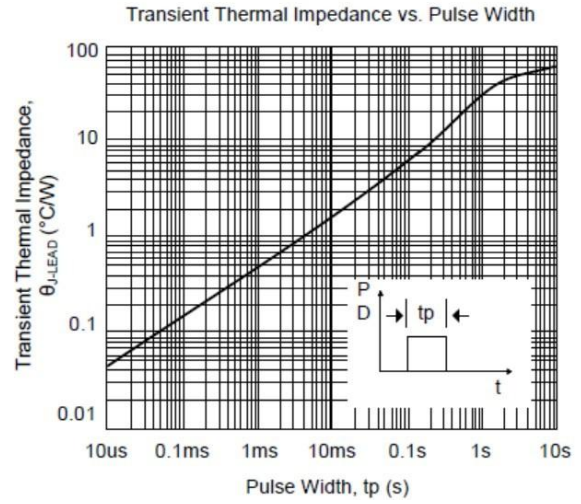
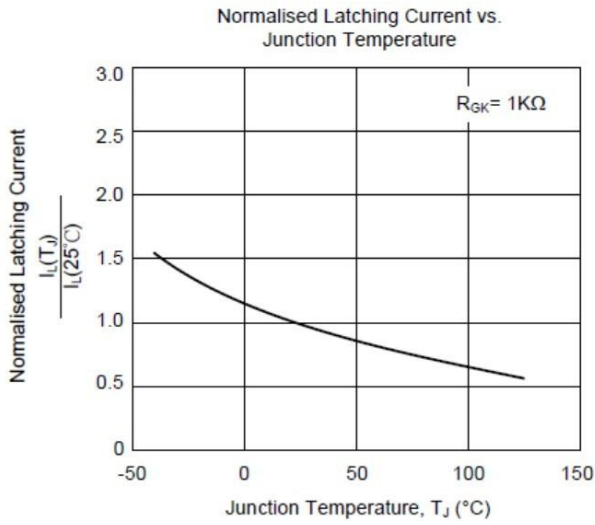
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I _{DRM} I _{RRM}	V _{AK} = Rated V _{DRM} or V _{RRM} ;			100	uA
Gate Trigger Current	I _{GT}	V _D =12V, I _T =0.1A	10		200	uA
Gate Trigger Voltage	V _{GT}	V _D =12V, I _T =0.1A			0.8	V
Peak Forward On-State Voltage	V _{TM}	I _T = 1.0A, I _G =50mA			1.8	V
Latch Current	I _L	I _G =1.2I _{GT}			6	mA
Holding Current	I _H	I _T =0.5mA, I _G =30mA			5	mA
Critical Rate of Rise of Off-State Voltage	dV/dt	V _D =67%V _{DRM} , R _{GK} =1kΩ,	10			V/μs

TYPICAL CHARACTERISTICS

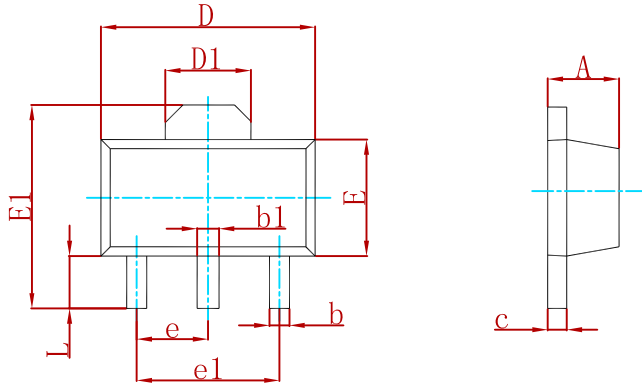
Maximum On-State Dissipation vs. Average On-State Current





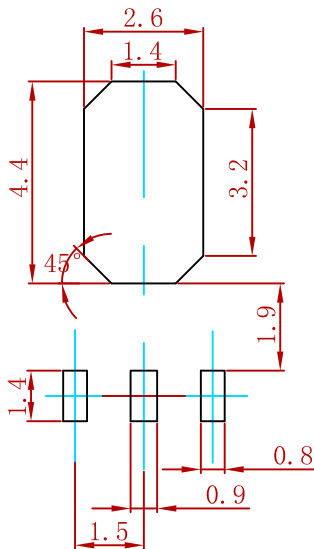


PACKAGE MECHANICAL DATA



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
BT169-MS	SOT-89	1000

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