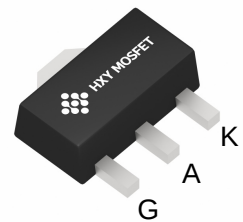




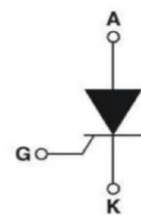
General Description

Glass passivated triacs in a plastic envelope, intended for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance.

Typical applications include motor control, industrial and domestic lighting, heating and static switching.



SOT-89



Package Marking and Ordering Information

Product ID	Pack	Packing Method	Qty(PCS)
BT169	SOT-89	Tape and Reel	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

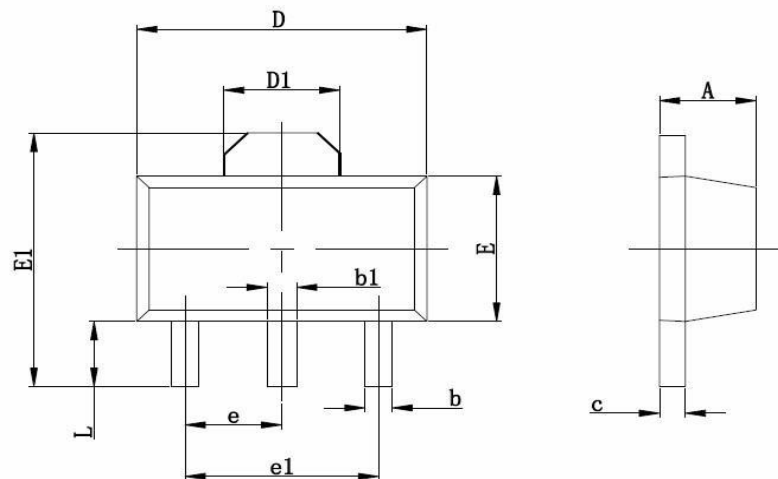
Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40~150	°C
Operating junction temperature range	T_j	-40~125	°C
Repetitive peak off-state voltage ($T_j=25^{\circ}\text{C}$)	V_{DRM}	600	V
Repetitive peak reverse voltage ($T_j=25^{\circ}\text{C}$)	V_{RRM}	600	V
RMS on-state current	$I_{T(RMS)}$	0.8	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	8	A

Electrical Characteristics (Ta=25°C unless otherwise specified)

Symbol	Test Condition	Value			Unit
		Min	Typ	Max	
I_{GT}	$V_D=12\text{V}, R_L=100\Omega$	-	10	60	μA
V_{GT}		-	-	1.2	V
V_{GD}	$V_D=1/2V_{DRM}$	0.2	-	-	V
I_H	$I_T=100\text{mA}, R_{GK}=1\text{k}\Omega$	-	-	3	mA
dV/dt	$V_D=75\%V_{DRM}, T_j=110^{\circ}\text{C}, R_{GK}=1\text{k}\Omega$	20	-	-	V/ μs
V_{TM}	$I_T=0.8\text{A}$	-	-	1.6	V
I_{DRM} I_{RRM}	$V_D=V_{DRM}=V_{RRM}$ $R_{GK}=1\text{k}\Omega$	-	-	0.1	mA



SOT-89 Package Outline Dimensions



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



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