



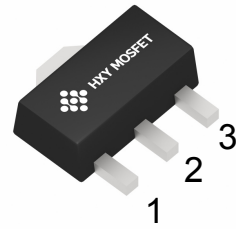
Features

Glass passivated triacs in a plastic 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.

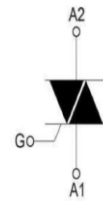
1. ANODE

2. ANODE

3. GATE



SOT-89



Package Marking and Ordering Information

Product ID	Pack	Packing Method	Qty(PCS)
BT134-600	SOT-89	Tape and Reel	200

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

Symbol	Parameter	Conditions	Value	Unit
V_{DRM} / V_{RRM}	repetitive peak off-state voltage		600	V
$I_{T(RMS)}$	RMS on-state current		2	A
I_{TSM}	Non repetitive surge peak on-state current	$t = 2ms \ T_j = 25^\circ C$	20	A
		$t = 16.7ms \ T_j = 25^\circ C$	16	
$I^2 t$	$I^2 t$ for fusing	$t = 10 \ ms$	2	$A^2 s$
di/dt	Critical-rate of rise of commutation current	I II III IV $I_G = 2I_{GT} \leq 100ns$ $F = 120Hz$	50 10	A/us
I_{GM}	Peak Gate Current	$T_j = 125^\circ C \ t_p = 20\mu s$	0.6	A
V_{GM}	Peak gate voltage	$T_j = 125^\circ C$	1	V
P_{GM}	Peak gate power	$T_j = 125^\circ C$	1	W
$P_{G(AV)}$	Average Gate Power Dissipation	$T_j = 125^\circ C$	0.5	W
T_j	Junction Temperature	-	-40 ~ 125	°C
T_{stg}	Storage Temperature	-	-40 ~ 150	°C

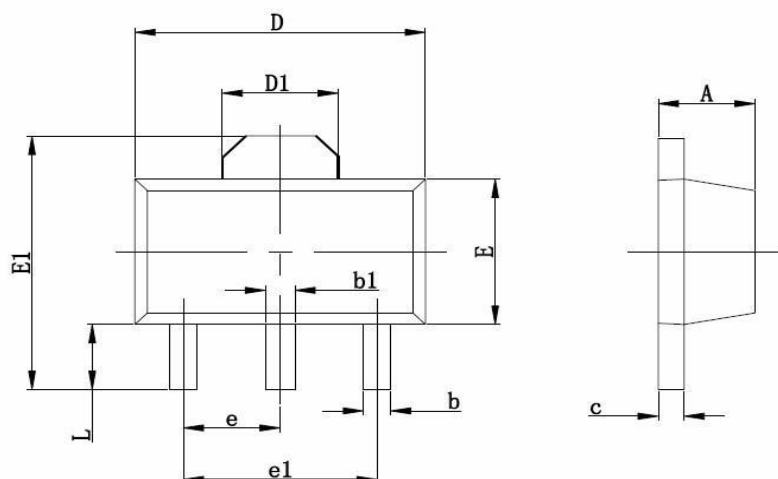


Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter		Symbol	Test conditions		Min	Typ	Max	Unit
Repetitive Peak Off-State Current Repetitive Peak Reverse Current		$I_{\text{DRM}}, I_{\text{RRM}}$	$V_{\text{DRM}} = V_{\text{RRM}} \quad T_{\text{j}} = 25^{\circ}\text{C}$				5	μA
			$V_{\text{DRM}} = V_{\text{RRM}} \quad T_{\text{j}} = 125^{\circ}\text{C}$				1	mA
Gate non-trigger voltage		V_{GD}	$V_{\text{D}} = 1/2 V_{\text{DRM}}$		0.2			V
On-state voltage		V_{TM}	$I_{\text{T}} = 2\text{A}, t_{\text{p}} = 380\mu\text{s}$				1.65	V
Gate trigger current	I	I_{GT}	$T_2(+), \text{G}(+)$	$V_{\text{D}} = 12\text{V}$ $R_{\text{L}} = 100\Omega$			3	mA
	II		$T_2(+), \text{G}(-)$				6	
	III		$T_2(-), \text{G}(-)$				4	
	IV		$T_2(-), \text{G}(+)$				10	
Gate trigger voltage	I	V_{GT}	$T_2(+), \text{G}(+)$	$V_{\text{D}} = 12\text{V}$ $R_{\text{L}} = 100\Omega$		0.8	2	V
	II		$T_2(+), \text{G}(-)$			0.8	2	
	III		$T_2(-), \text{G}(-)$			0.8	2	
	IV		$T_2(-), \text{G}(+)$			0.8	2.5	
Holding current		I_{H}	$V_{\text{D}} = 12\text{V}, I_{\text{GT}} = 100\text{mA}$				30	mA
Critical-rate of rise of commutation voltage		dV/dt	$V_{\text{DM}} = 67\% V_{\text{DRM}}$ Gate open $T_{\text{j}} = 125^{\circ}\text{C}$				50	V/us
Rate of change of commutating voltage		(dI/dt) _c	$V_{\text{DM}} = 400\text{V} \quad T_{\text{j}} = 125^{\circ}\text{C}$ (dI/dt) _c = 5.4A/ms Gate open				20	V/us
Turn-on time		t_{gt}	$I_{\text{TM}} = 16\text{A} \quad , V_{\text{DM}} = V_{\text{DRM(MAX)}}$ $I_{\text{G}} = 0.1\text{A}, dI_{\text{G}}/dt = 5\text{A}/\mu\text{S}$				2	us



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	0.350	0.520	0.013	0.197
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	2.350	2.550	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP		0.060TYP	
e1	3.000 TYP		0.118TYP	
L	0.900	1.100	0.035	0.047



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