



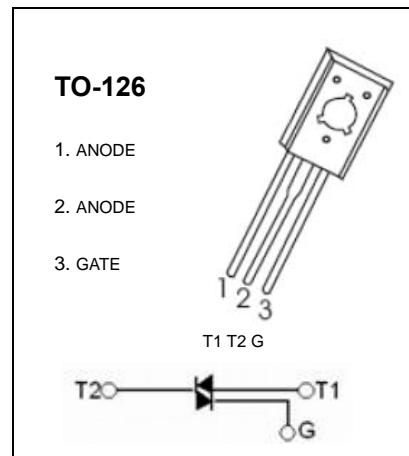
## TO-126 Plastic-Encapsulate Thyristors

### BT134 TRIAC

#### 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.



#### MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol Para	meter	Test conditions	Value	Unit
$V_{DRM}/V_{RRM}$	Repetitive peak off-state/reverse voltages		600	V
$I_{T(RMS)}$	RMS on-state current Non-repetitive peak on-state current	full sine wave ; $T_{mb} \leq 107^\circ\text{C}$	4	A
$I^2t$	$I^2t$ for fusing	$t=10\text{ms}$	3.1	$\text{A}^2\text{s}$
$dI_T/dt$	Repetitive rate of rise of on-state current after triggering	$dI_G/dt=0.2\text{A/us}$		
		$T2+G+$	50	$\text{A/us}$
		$T2+G-$	50	$\text{A/us}$
		$T2-G-$	50	$\text{A/us}$
		$T2-G+$	10	$\text{A/us}$
$I_{GM}$	Peak gate current		2	A
$V_{GM}$	Peak gate voltage		5	V
$P_{GM}$	Peak gate power		5	W
$P_{G(AV)}$	Average gate power	over any 20 ms period	0.5	W
$T_{stg}$	Storage Temperature		-40~150	$^\circ\text{C}$
$T_j$	Operating junction Temperature		125	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$  unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Rated repetitive peak off-state current	$I_{DRM}$	$V_D=V_{DRM}$			10	$\mu\text{A}$
On-state voltage	$V_{TM}$	$I_T=3\text{A}$		1.4	1.7	V
Gate trigger current	$I_{GT}$	$T_2(+), G(+)$	$V_D=12\text{V}$		7	mA
		$T_2(+), G(-)$			7	mA
		$T_2(-), G(-)$			7	mA
		$T_2(-), G(+)$			20	mA
Gate trigger voltage	$V_{GT}$	$T_2(+), G(+)$	$R_L=100\Omega$		1.45	V
		$T_2(+), G(-)$			1.45	V
		$T_2(-), G(-)$			1.45	V
		$T_2(-), G(+)$			2	V
Holding current	$I_H$	$I_T=100\text{mA}$ $I_G=20\text{mA}$			15	mA
Thermal Resistance Junction to mounting base	$R_{th j-mb}$	full cycle			3.0	K/W
		half cycle			3.7	K/W
Thermal Resistance Junction to ambient	$R_{th j-a}$	In free air		60		K/W