

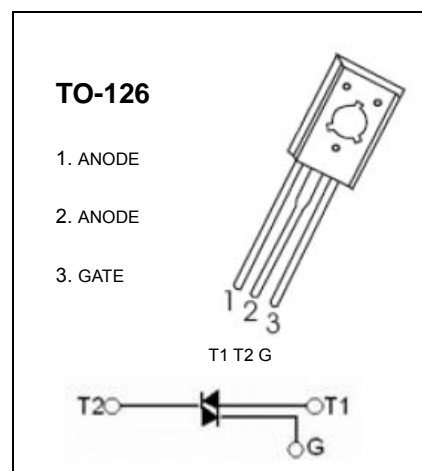
TO-126 Plastic-Encapsulate Thyristors

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	Parameter	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	A^2s
di_T/dt	Repetitive rate of rise of on-state current after tiggering	$di_G/dt=0.2\text{A/us}$		
		T2+G+	50	A/us
		T2+G-	50	A/us
		T2-G-	50	A/us
	T2-G+	10	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°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	μ A
On-state voltage	V _{TM}	I _T =3A		1.4	1.7	V
Gate trigger current	I _{GT}	T ₂ (+), G(+)	V _D =12V		7	mA
		T ₂ (+), G(-)			7	mA
		T ₂ (-), G(-)	R _L =100 Ω		7	mA
		T ₂ (-), G(+)			20	mA
Gate trigger voltage	V _{GT}	T ₂ (+), G(+)	V _D =12V		1.45	V
		T ₂ (+), G(-)			1.45	V
		T ₂ (-), G(-)	R _L =100 Ω		1.45	V
		T ₂ (-), G(+)			2	V
Holding current	I _H	I _T =100mA I _G =20mA			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