

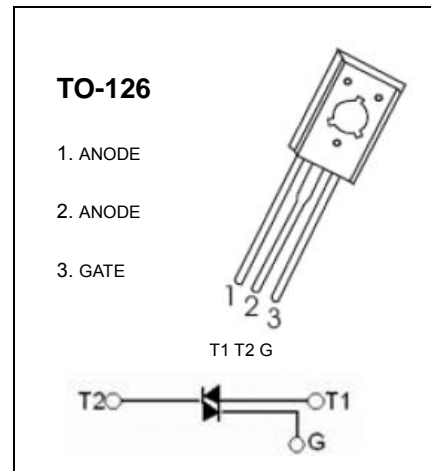
TO-126 Plastic-Encapsulate Thyristors

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.



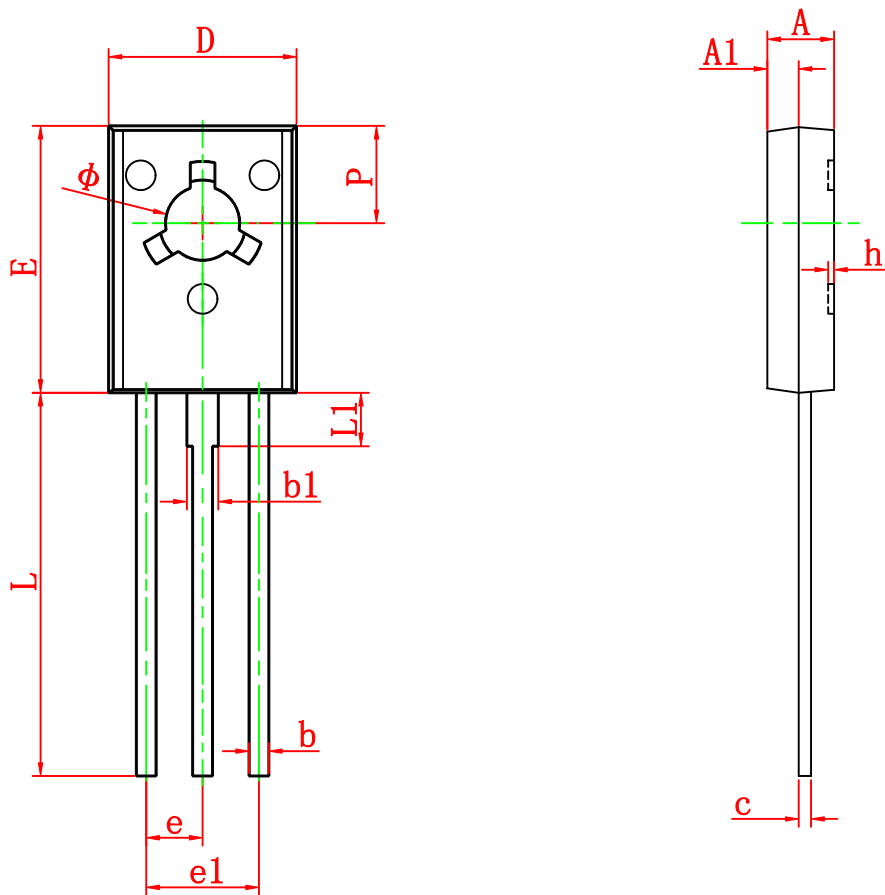
MAXIMUM RATINGS($T_a=25^\circ\text{C}$ unless otherwise noted)

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	$di_G/dt=0.2\text{A}/\mu\text{s}$		
		T2+G+	50	A/ μs
		T2+G-	50	A/ μs
		T2-G-	50	A/ μs
		T2-G+	10	A/ μs
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	

TO-126 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.500	2.900	0.098	0.114
A1	1.100	1.500	0.043	0.059
b	0.660	0.860	0.026	0.034
b1	1.170	1.370	0.046	0.054
c	0.450	0.600	0.018	0.024
D	7.400	7.800	0.291	0.307
E	10.600	11.000	0.417	0.433
e	2.290 TYP		0.090 TYP	
e1	4.480	4.680	0.176	0.184
h	0.000	0.300	0.000	0.012
L	15.300	15.700	0.602	0.618
L1	2.100	2.300	0.083	0.091
P	3.900	4.100	0.154	0.161
Φ	3.000	3.200	0.118	0.126