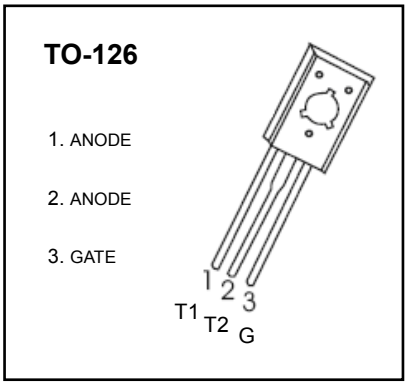
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-126 Plastic-Encapsulate Transistors

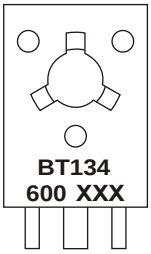
BT134 TRIAC



FEATURES

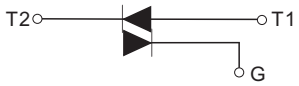
Glass passivated triacs in a plastic, intended for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance.
Typical applications include motor control, industrial and domestic lighting , heating and static switching.

MARKING



BT134=Device code
XXX=Code

Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
BT134	TO-126	Bulk	200pcs/Bag
BT134-TU	TO-126	Tube	60pcs/Tube

MAXIMUM RATINGS(T_a=25℃ unless otherwise noted)

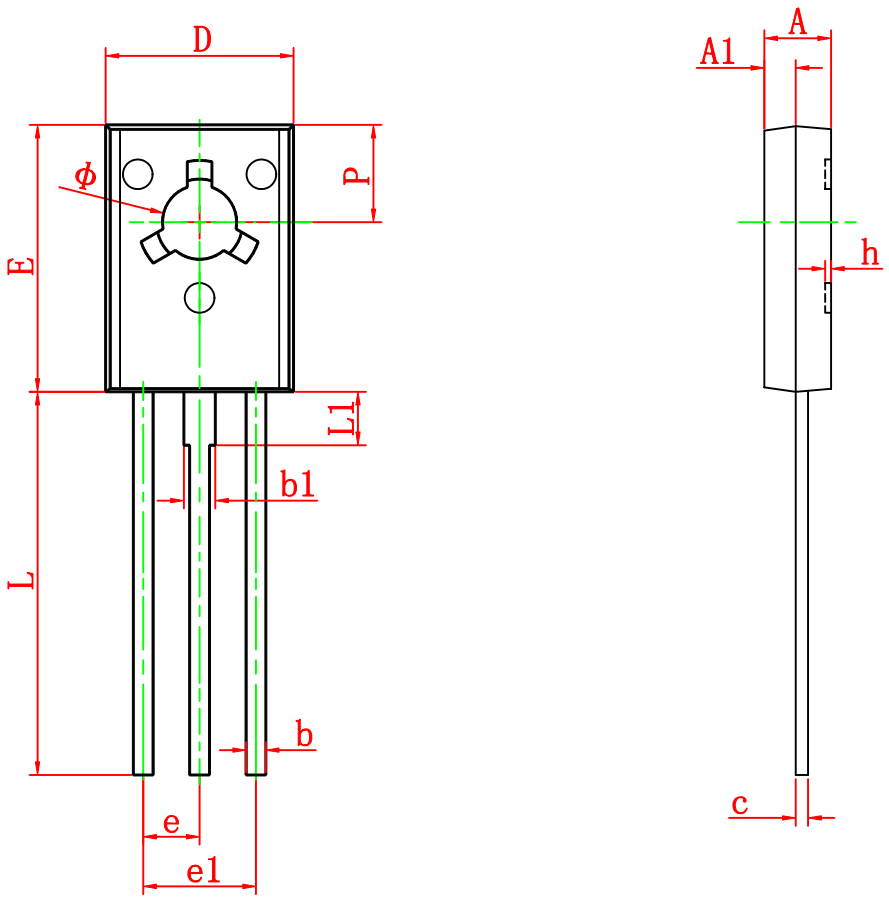
Symbol	Parameter	Test conditions	Value	Unit
V_{DRM}/V_{RRM}	Repetitive peak off-state/reverse voltages		600	V
$I_{T(RMS)}$	RMS on-state current Non-repetitive peak on-state current	full sine wave ;Tmb≦107℃	4	A
I^2t	I^2t for fusing	t=10ms	3.1	A^2s
dI_T/dt	Repetitive rate of rise of on-state current after tiggering	dI_G/dt=0.2A/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	℃
T_j	Operating junction Temperature		125	℃

ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

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