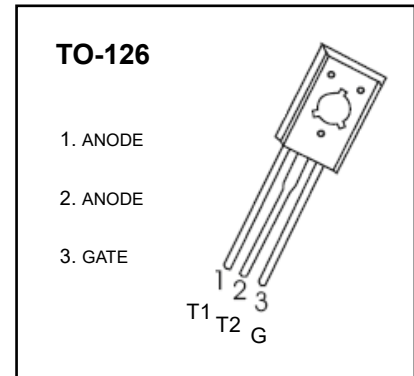


TO-126 Plastic-Encapsulate Transistors

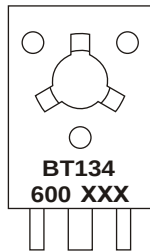
BT134 TRIAC

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.

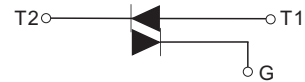


MARKING



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

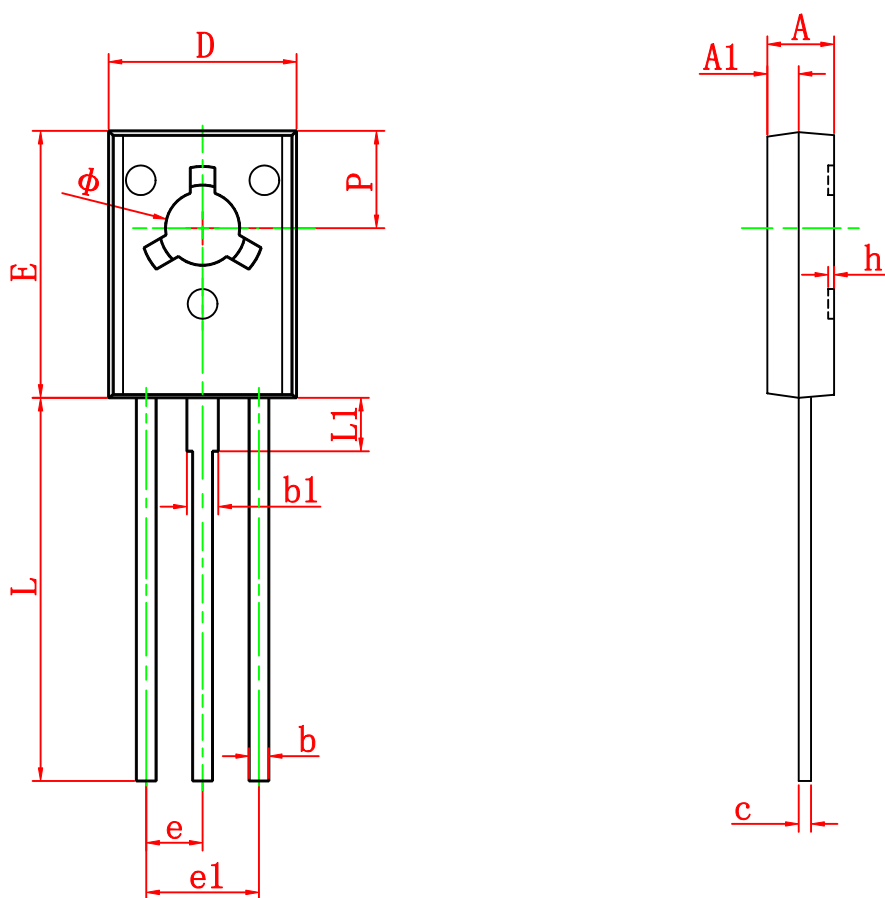
Symbol	Parameter	Test conditions	Value	Unit
$V_{\text{DRM}}/V_{\text{RRM}}$	Repetitive peak off-state/reverse voltages		600	V
$I_{\text{T(RMS)}}$	RMS on-state current Non-repetitive peak on-state current	full sine wave ; $T_{\text{mb}} \leq 107^{\circ}\text{C}$	4	A
I^2t	I^2t for fusing	$t=10\text{ms}$	3.1	A^2s
di_{T}/dt	Repetitive rate of rise of on-state current after triggering	$dI_{\text{G}}/dt=0.2\text{A}/\mu\text{s}$		
		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
$P_{\text{G(AV)}}$	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		-40~125	$^{\circ}\text{C}$

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