

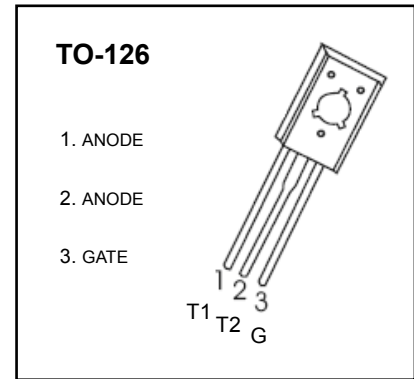
## TO-126 Plastic-Encapsulate Transistors

### BT134 TRIAC

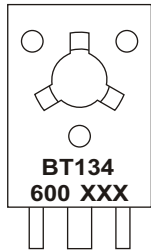
#### FEATURES

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.

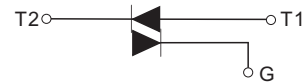


#### MARKING



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)

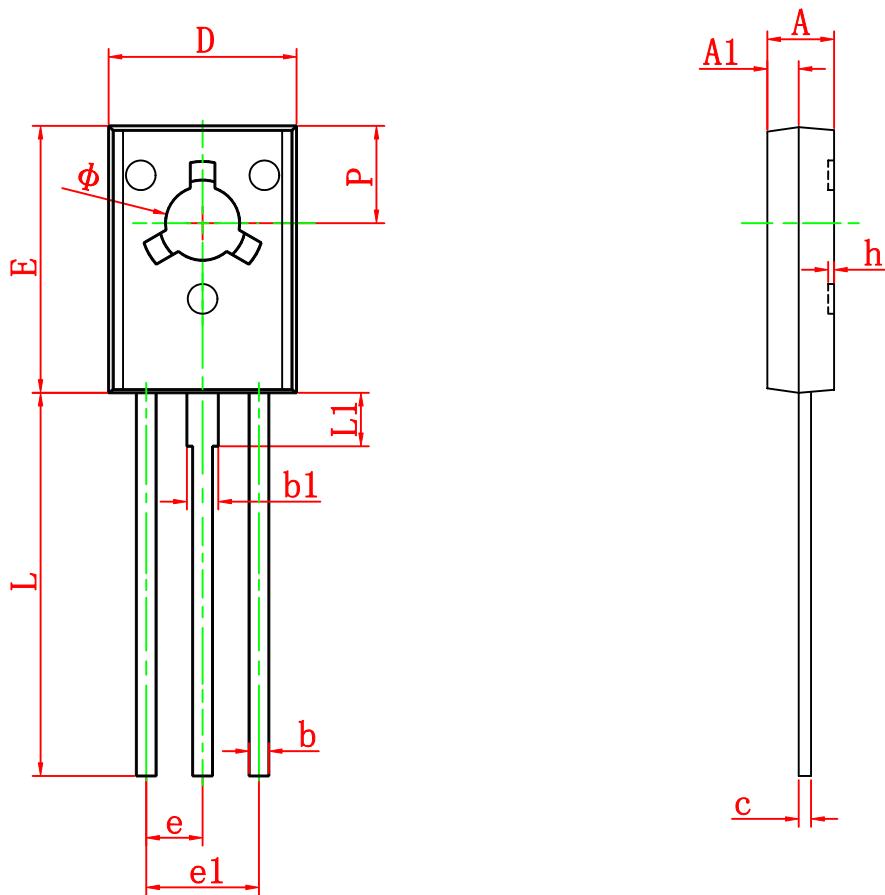
Symbol	Parameter	Test conditions	Value	Unit
$V_{DRM}/V_{RRM}$	Repetitive peak off-state/reverse voltages		600	V
$I_{T(RMS)}$	RMS on-state current Non-repetitive peak on-state current	full sine wave ; $T_{mb} \leq 107^{\circ}\text{C}$	4	A
$I^2t$	$I^2t$ for fusing	$t=10\text{ms}$	3.1	$\text{A}^2\text{s}$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

$T_a=25\text{ }^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Rated repetitive peak off-state current	$I_{\text{DRM}}$	$V_D=V_{\text{DRM}}$			10	$\mu\text{A}$
On-state voltage	$V_{\text{TM}}$	$I_T=3\text{A}$		1.4	1.7	V
Gate trigger current	$I_{\text{GT}}$	$T_2(+),\text{TG}(+)$	$V_D=12\text{V}$ $R_L=100\ \Omega$		7	mA
		$T_2(+),\text{TG}(-)$			7	mA
		$T_2(-),\text{TG}(-)$			7	mA
		$T_2(-),\text{TG}(+)$			20	mA
Gate trigger voltage	$V_{\text{GT}}$	$T_2(+),\text{TG}(+)$	$V_D=12\text{V}$ $R_L=100\ \Omega$		1.45	V
		$T_2(+),\text{TG}(-)$			1.45	V
		$T_2(-),\text{TG}(-)$			1.45	V
		$T_2(-),\text{TG}(+)$			2	V
Holding current	$I_{\text{H}}$	$I_T=100\text{mA}$ $I_G=20\text{mA}$			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
$\Phi$	3.000	3.200	0.118	0.126