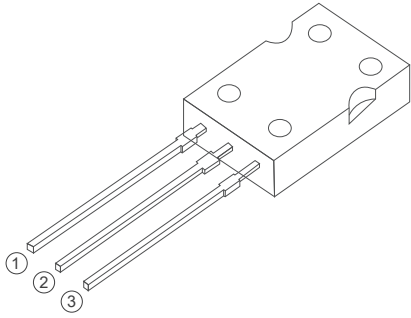
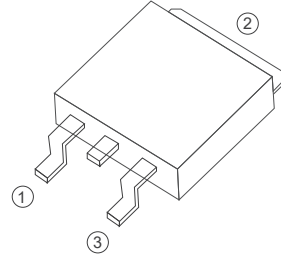


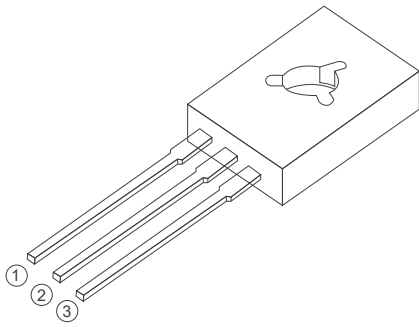
BT134 Series  
4A TRIACs  
4 Quadrants TRIACs



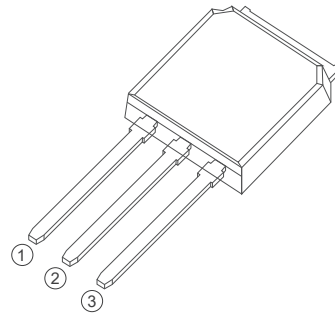
SOT-82(TO-126P)



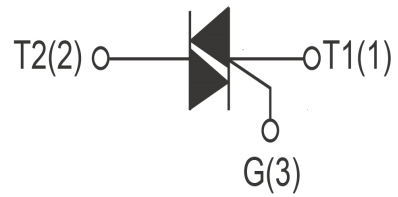
TO-252



TO-126



TO-251



## FEATURES

>  $I_T(RMS)$ : 4A    > VGT: 1.5V    > VDRM VRRM:800V

## APPLICATIONS

Washing machine, vacuums, massager, solid state relay, AC Motor speed regulation and so on.

### Absolute Maximum Ratings (T<sub>J</sub>=25°C unless otherwise specified)

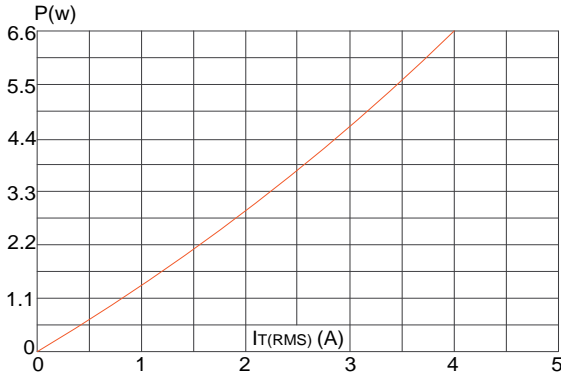
Symbol	Parameter	Conditions	Ratings	Unit
VDRM VRRM	Repetitive Peak Off-State Voltage	BT134-600	600	V
IT(RMS)	R.M.S On-State Current	T <sub>c</sub> =110°C	4	A
ITSM	Surge On-State Current	tp=16.7ms/tp=10ms	25/27	A
I <sup>2</sup> t	I <sup>2</sup> t for fusing	Tp=10ms	3.1	A <sup>2</sup> s
PG(AV)	Average Gate Power Dissipation	T <sub>J</sub> =125°C	0.5	W
IGM	Peak Gate Current	tp=20us T <sub>J</sub> =125°C	2	A
T <sub>J</sub>	Operating Junction Temperature		~40~125	°C
TSTG	Storage Temperature		~40~150	°C

### Electrical Characteristics (T<sub>J</sub>=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Value		Unit	
			D	E		
IDRM	Repetitive Peak Off-State Current	T <sub>J</sub> =25°C	≤10		uA	
		T <sub>J</sub> =125°C	≤0.5		mA	
IRRM	Repetitive Peak Reverse Current	T <sub>J</sub> =25°C	≤10		uA	
		T <sub>J</sub> =125°C	≤0.5		mA	
VTM	Forward "on" voltage	IT=5A tp=380us	≤1.7		V	
VGD	gate non-trigger voltage	VD=12V, T <sub>J</sub> =125°C	≥0.2		V	
IH	Holding current	VD=12V ,IGT=0.1A	≤10	≤15	mA	
VGT	Gate trigger voltage	VD=12V	≤1.5		V	
IGT	Gate trigger current	VD=12V, IGT=0.1A	I, II, III	≤5	≤10	mA
			IV	≤10	≤25	mA
di/dt	Critical-rate of rise of commutation current.	IT=6A ,IGT=0.2A, dI <sub>g</sub> /dt=0.2A/us	≥50		A/us	
			≥10		A/us	
dv/dt	Critical-rate of rise of commutation voltage	T <sub>J</sub> =125°C VD=2/3VDRM Gate open circuit	≥5	≥50	V/us	

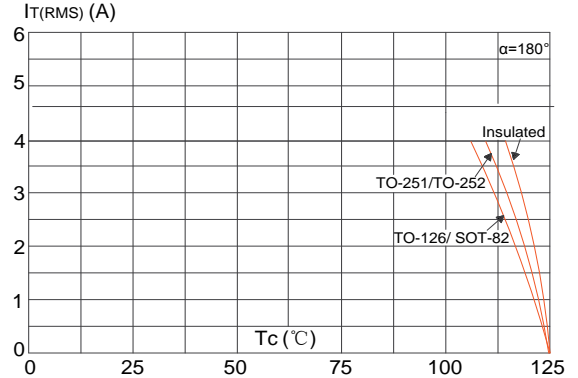
**FIG1**

Maximum power dissipation versus RMS on-state current



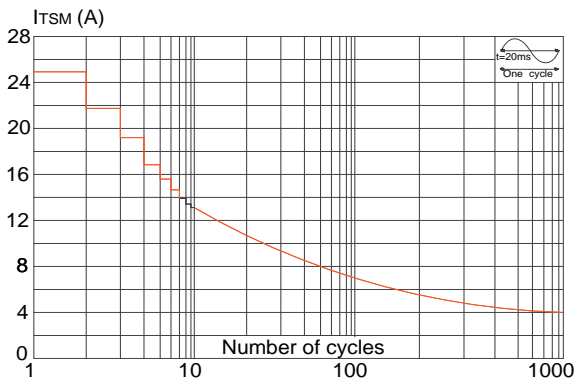
**FIG2**

RMS on-state current versus case temperature



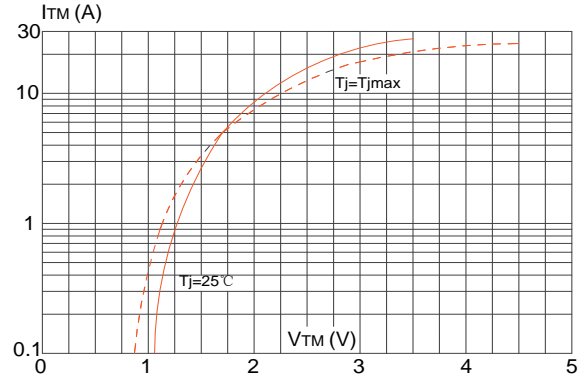
**FIG3**

Surge peak on-state current versus number of cycles



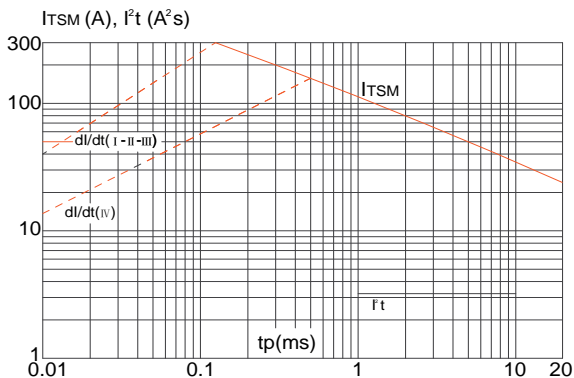
**FIG4**

On-state characteristics (maximum values)



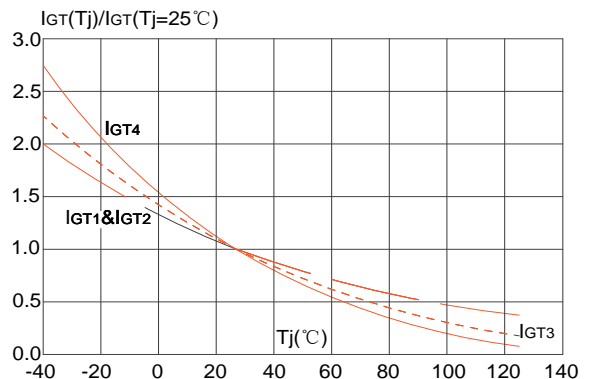
**FIG5**

Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 20\text{ms}$ , and corresponding value of  $I^2t$  ( $di/dt < 100\text{A}/\mu\text{s}$ )



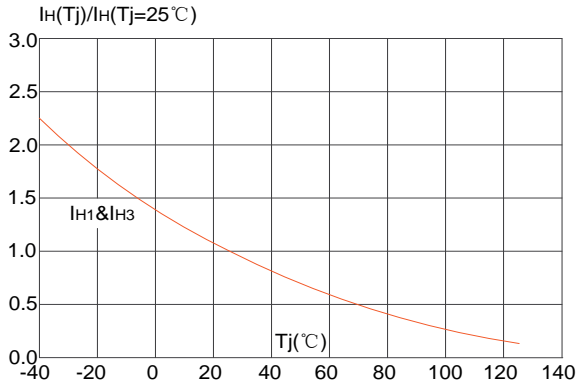
**FIG6**

Relative variations of gate trigger current, holding current and latching current versus junction temperature



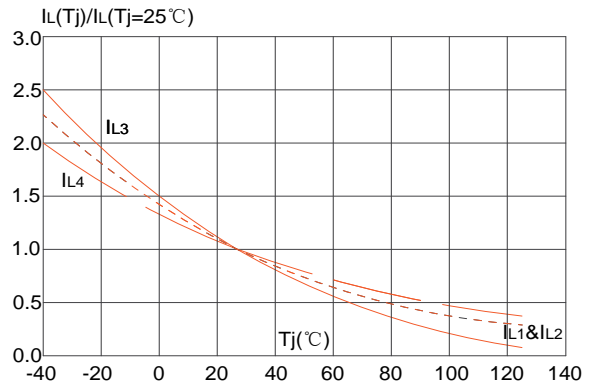
**FIG7**

**FIG.7:** Relative variations of holding current versus junction temperature

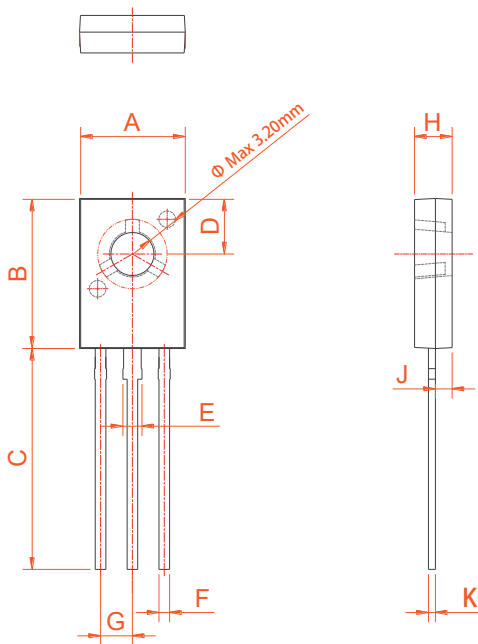


**FIG8**

**FIG.8:** Relative variations of latching current versus junction temperature



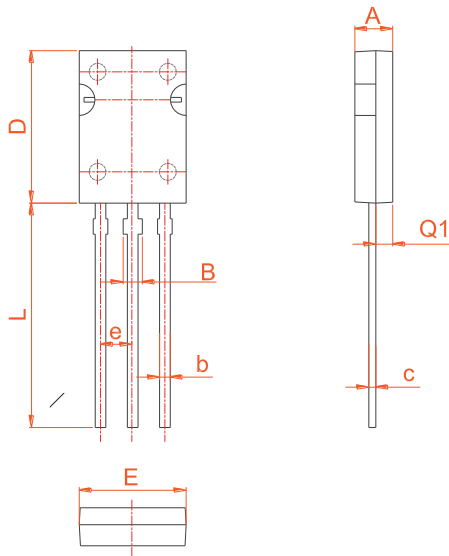
**PACKAGE MECHANICAL DATA**



TO-126

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	7.40		7.80	0.291		0.307
B	10.6		11.2	0.417		0.441
C	15.3		16.3	0.602		0.642
D	3.90		4.10	0.154		0.161
E	1.17		1.47	0.046		0.058
F	0.66		0.86	0.026		0.034
G		2.29			0.090	
H	2.50		2.90	0.098		0.114
J	1.10		1.50	0.043		0.059
K	0.45		0.60	0.018		0.024

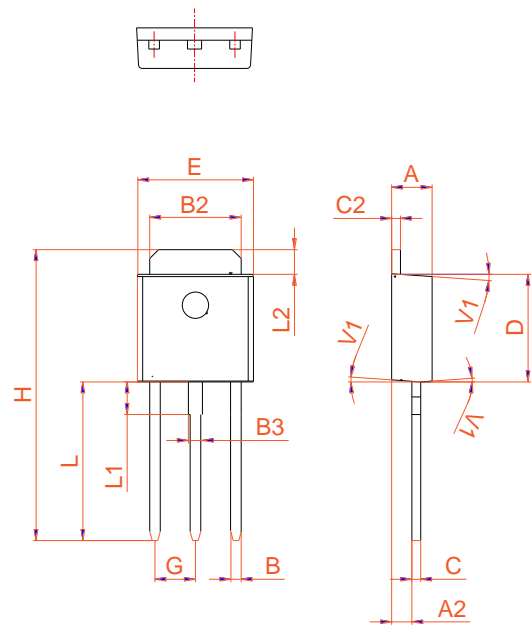
**PACKAGE MECHANICAL DATA**



**SOT-82**

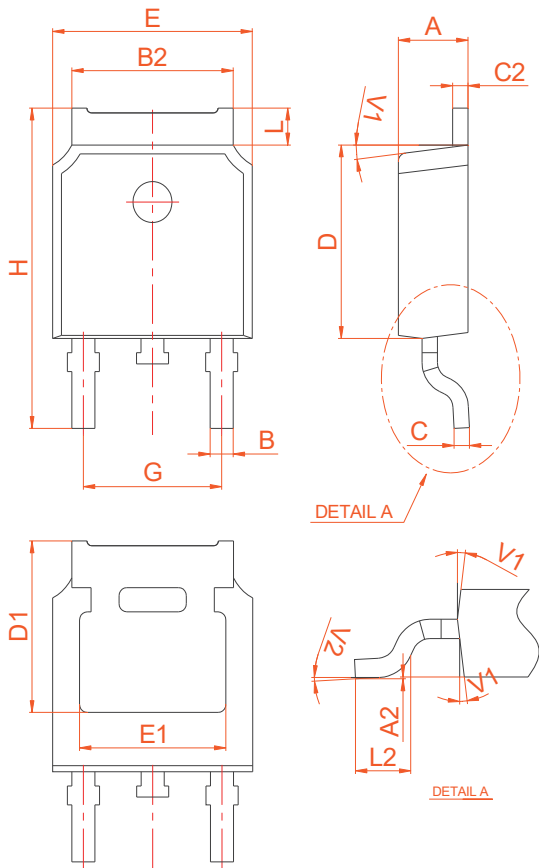
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.45	2.55	2.65	0.096	0.100	0.104
b	0.71	0.76	0.81	0.028	0.030	0.032
B	1.27	1.37	1.45	0.050	0.054	0.057
c	0.48	0.50	0.52	0.019	0.020	0.021
D	10.60	10.80	11.00	0.417	0.425	0.433
E	7.30		7.70	0.287		0.303
e	2.24	2.29	2.34	0.088	0.090	0.092
L	15.30	15.60	15.90	0.602	0.614	0.626
Q1	1.17	1.27	1.37	0.046	0.050	0.054

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.90		1.20	0.035		0.047
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
B3	0.76		0.85	0.030		0.033
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G		2.30			0.091	
H	16.0		17.0	0.630		0.669
L	8.90		9.40	0.350		0.370
L1	1.80		1.90	0.071		0.075
L2	1.37		1.50	0.054		0.059
V1		4°			4°	



**TO-251**

**PACKAGE MECHANICAL DATA**



TO-252

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.03		0.23	0.001		0.009
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
C	0.45		0.55	0.018		0.022
C2	2.70		2.90	0.106		0.114
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G	4.40		4.70	0.173		0.185
H	9.35		10.6	0.368		0.417
L1	1.30		1.70	0.051		0.067
L2	1.37		1.50	0.054		0.059
L3		0.8			0.031	
L4		0.8			0.031	
V1		4°			4°	
V2	0°		8°	0°		8°

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