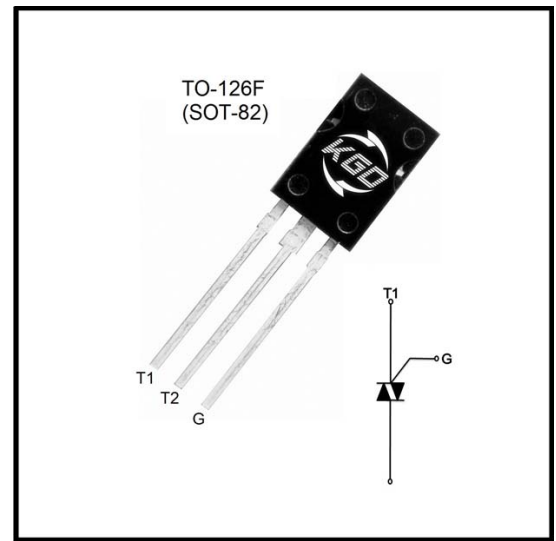


BT134 Series

- Description:**
 High current density due to mesa technology;Glass Passivation.
- Applications**
 BT134 series triacs is suitable for general purpose AC switching. They can be used as an ON/OFF Function in applications such as static relays,heating regulation,induction motor stator circuits... or for phase control operation light dimmers,motor speed controllers.
- Features:**
 Blocking voltage to 600V
 On-state RMS current to 4A
 Non-repetitive peak on-state current to 27A
- Absolute Maximum Ratings**



Symbol	Parameter	Conditions	Value	Unit	
V_{DRM}	Repetitive peak off-state voltage	$T_J=25^{\circ}C$	600	V	
V_{RRM}	Repetitive peak Reverse voltage	$T_J=25^{\circ}C$	600	V	
$I_{T(RMS)}$	RMS on-state current (full sine wave)	$T_c=107^{\circ}C$	4	A	
I_{TSM}	Non-repetitive surge peak On-state current (full cycle, $T_J=25^{\circ}C$)	$f=60Hz, tp=16.7ms$	27	A	
		$f=50Hz, tp=20ms$	25		
I^2t	I^2t Value for fusing	$tp=10ms$	3.1	A^2S	
I_{GM}	Peak gate current	$tp=20\mu s, T_J=125^{\circ}C$	2	A	
$P_{G(AV)}$	Average gate power dissipation		0.5	W	
P_{GM}	Peak gate power dissipation	$tp=10ms, T_J=125^{\circ}C$	5	W	
T_{STG}	Storage temperature		-40	150	$^{\circ}C$
T_J	Junction temperature		-40	125	$^{\circ}C$

BT134 Series
● Electrical Characteristics

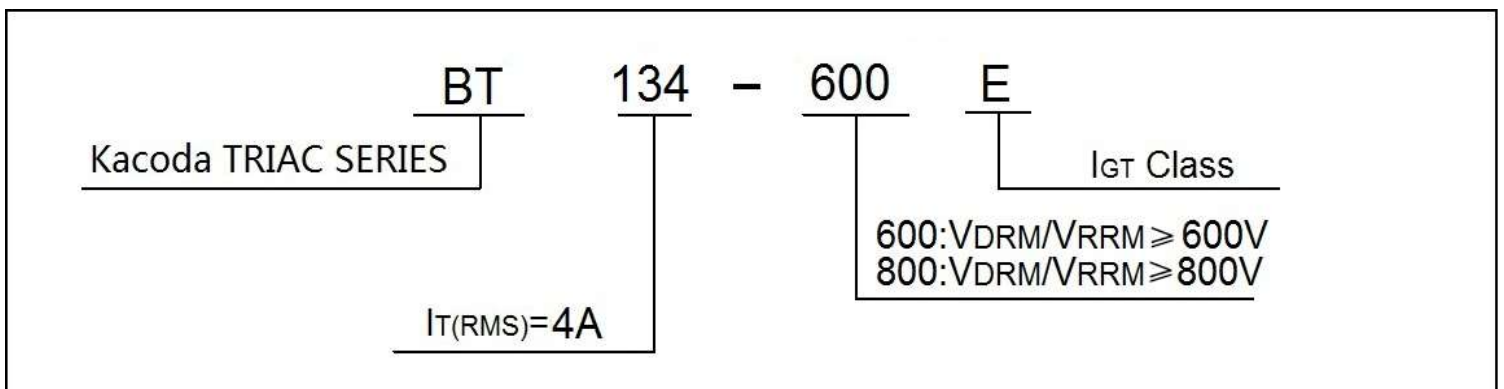
Symbol	Conditions	Quadrant	Value				Unit	
			D	E	F	G		
I_{GT}	$V_D=12V, R_L=33\Omega$	I - II - III	5	10	25	50	mA	
		IV	10	25	70	100		
V_{GT}		ALL	MAX	1.3			V	
V_{GD}	$V_D=V_{DRM}, R_L=3.3K\Omega, T_J=125^\circ C$	ALL	MIN	0.2			V	
I_L	$I_G=1.2I_{GT}$	I - III - IV	MAX	15	30	40	60	mA
		II		20	40	60	90	
I_H	$I_T=100mA$		MAX	10	25	30	60	mA
dv/dt	$V_{DM}=67\%V_{DRM}, \text{gate open}, T_J=125^\circ C$		MIN	5	10	50	200	V/ μs

● Electrical Characteristics

Symbol	Parameter	Numerical	Unit	
V_{TM}	$I_T=5A, t_p=380\mu s$ $T_J=25^\circ C$	1.7	V	
I_{DRM}	$V_D=V_{DRM}, V_R=V_{RRM}$	$T_J=25^\circ C$	5	μA
I_{RRM}		$T_J=125^\circ C$	1	mA

● Thermal Characteristics

Symbol	Parameter	Numerical(MAX)	Unit
$R_{th(j-c)}$	Junction to case(AC)	3.7	$^\circ C/W$
$R_{th(j-a)}$	Junction to ambient(AC)	55	$^\circ C/W$

● Ordering Information


● Package Outline Dimensions

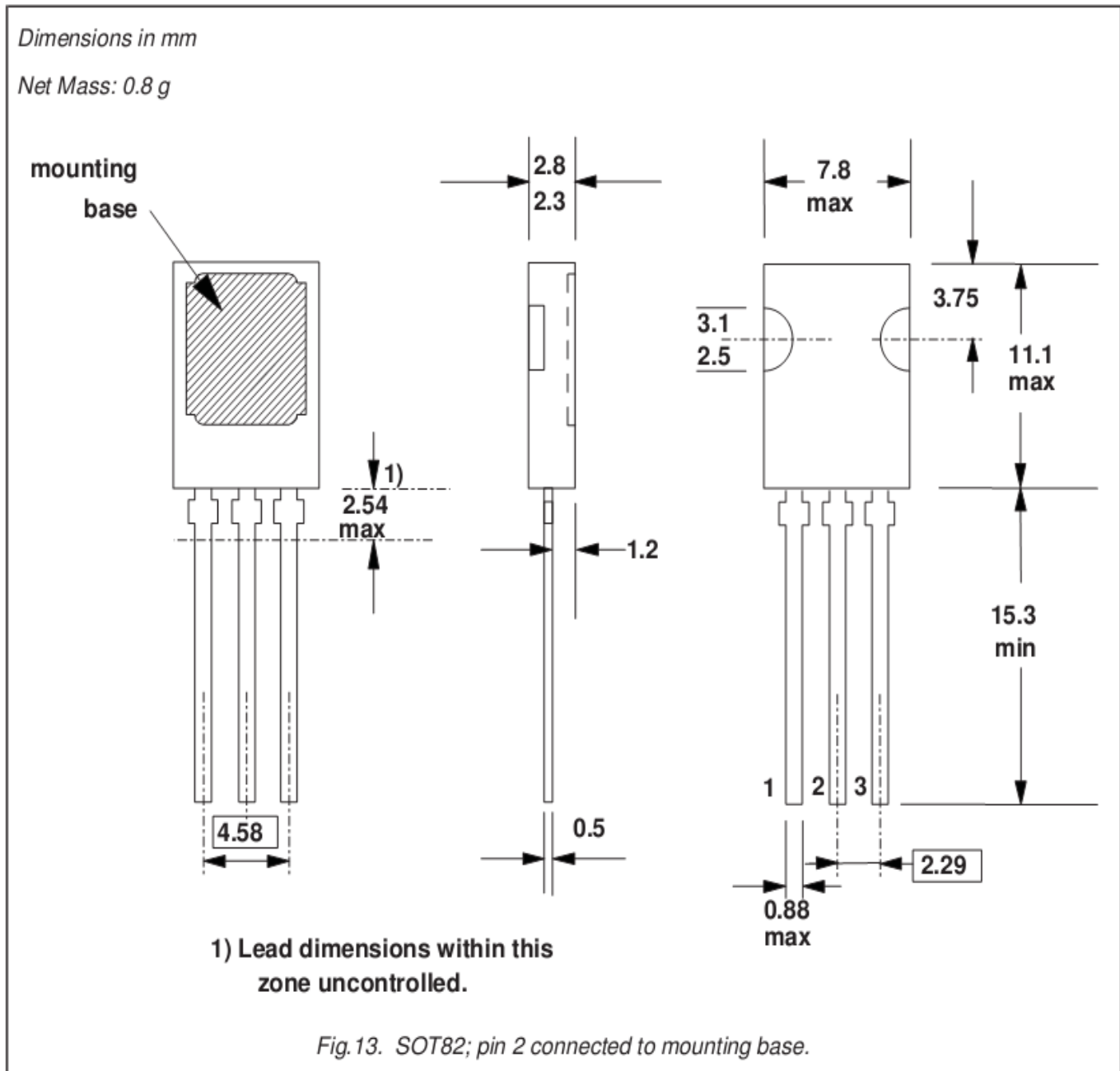


FIG.1:Maximum power dissipation versus RMS on-state current(full cycle)

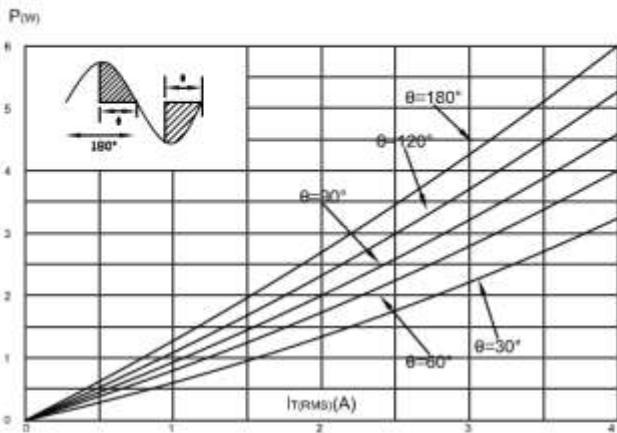


FIG.2:RMS on-state current versus case temperature(full cycle)

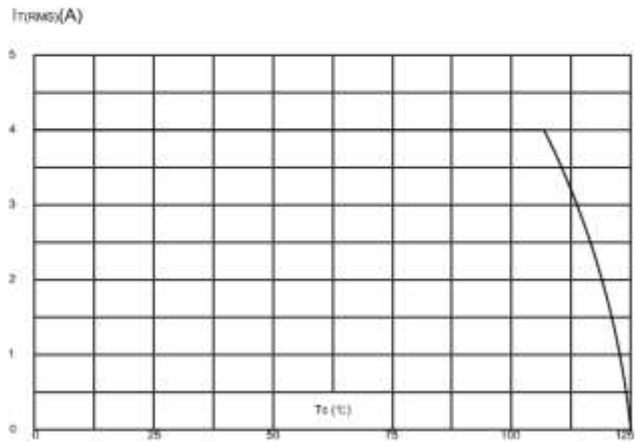


FIG.3:On-state characteristics (maximum values).

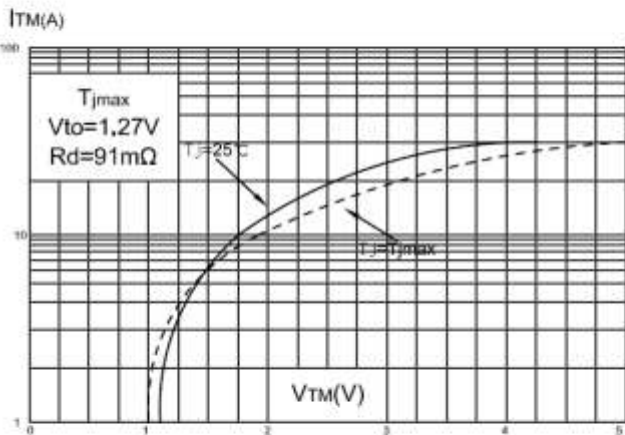


FIG.4:Surge peak on-state current versus number of cycles.

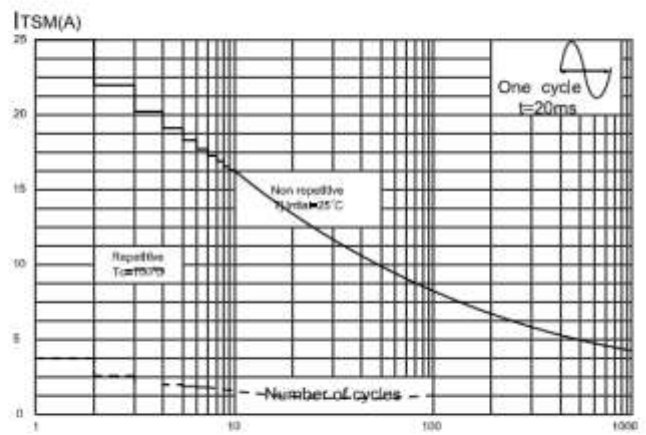


FIG.5:Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 10ms$, and corresponding value of I^2t .

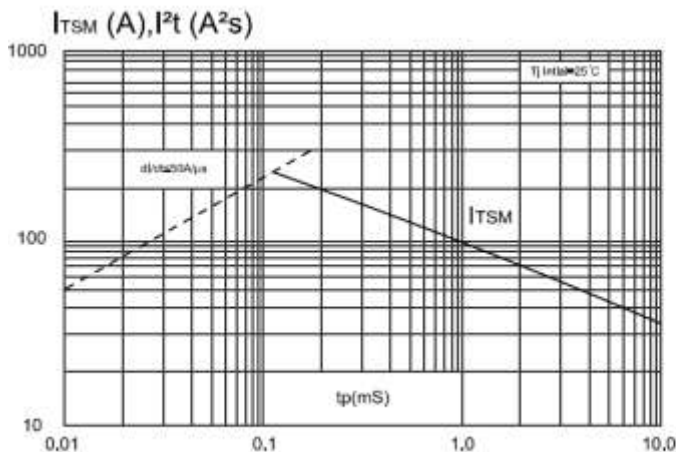


FIG.6:Relative variations of gate trigger current, holding current and latching current versus junction temperature(typical values)

