



BT134 TRIACs

●Product features

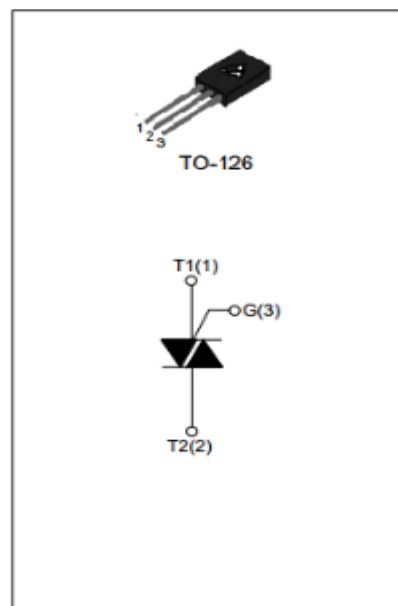
Single mesa structure (Single Mesa),
Table glass passivation process,
three layers of metal on the back
The applicable model: BT134,

●The main purposes

Mahjong machine, washing machine
Solid state relay, AC motor speed control

●Package

TO-126



●Main Feature (Tj=25℃)

Symbol	Value	Unit
$I_T(\text{RMS})$	4.0	A
$V_{\text{DRM}} / V_{\text{RRM}}$	600/800	V
V_{TM}	1.5	V

●Absolute ratings (Limiting Values)

Symbol	Parameter	Value	Unit
I_{TSM}	Non repetitive surge peak on-state Current (tp=10ms)	40	A
I^2t	(tp=10ms)	5.1	A ² S
di/dt	$I_G=2IGT$, $tr \leq 100\text{ns}$, $T_j=125^\circ\text{C}$	50	A/ μs
I_{GM}	Peak gate current(tp=20us)	4	A
$P_{G(AV)}$	Average gate power	1	W
Tstg	Storage temperature	-40--+150	℃
Tj	Operating junction temperature	-40--+125	



●Thermai Resistances

Symbol	Parameter		Value	Unit
Rth (j-c)	Junction to case	TO-126	5.4	°C/W

●Electrical characteristics (T_j=25°C unless otherwise stated)

Symbol	Test Conditions		Value						Unit
I _{GT}	V _D =12V, R _L =30 Ω	I II III	<5						mA
		IV	<10						
I _{DRM}	V _D =V _{DRM}	T _j =25℃	≤5						μ A
		T _j =125℃	≤1						mA
I _{RRM}	V _D =V _{RRM}	T _j =25℃	≤5						μ A
		T _j =125℃	≤1						mA
I _L	I _G =1.2I _{GT}	I III	<25						mA
		IV	<25						
		II	<30						
V _{GT}	V _D =12V, R _L =30 Ω		≤1.3						V
V _{GD}	V _D =V _{DRM} , R _L =3.3K Ω T _j =125℃		≥0.2						V
V _{TM}	I _{TM} =6A,tp=380 μ s		1.6						V
I _H	V _D =12V, I _T =200mA		≤10	≤15	≤35	≤60	≤10	≤15	mA
dV/dt	V _D =67%V _{DRM} , GateOpen, T _j =125℃		≥20	≥40	≥200	≥800	≥20	≥50	v/ μ s



● Measure of package
TO-126

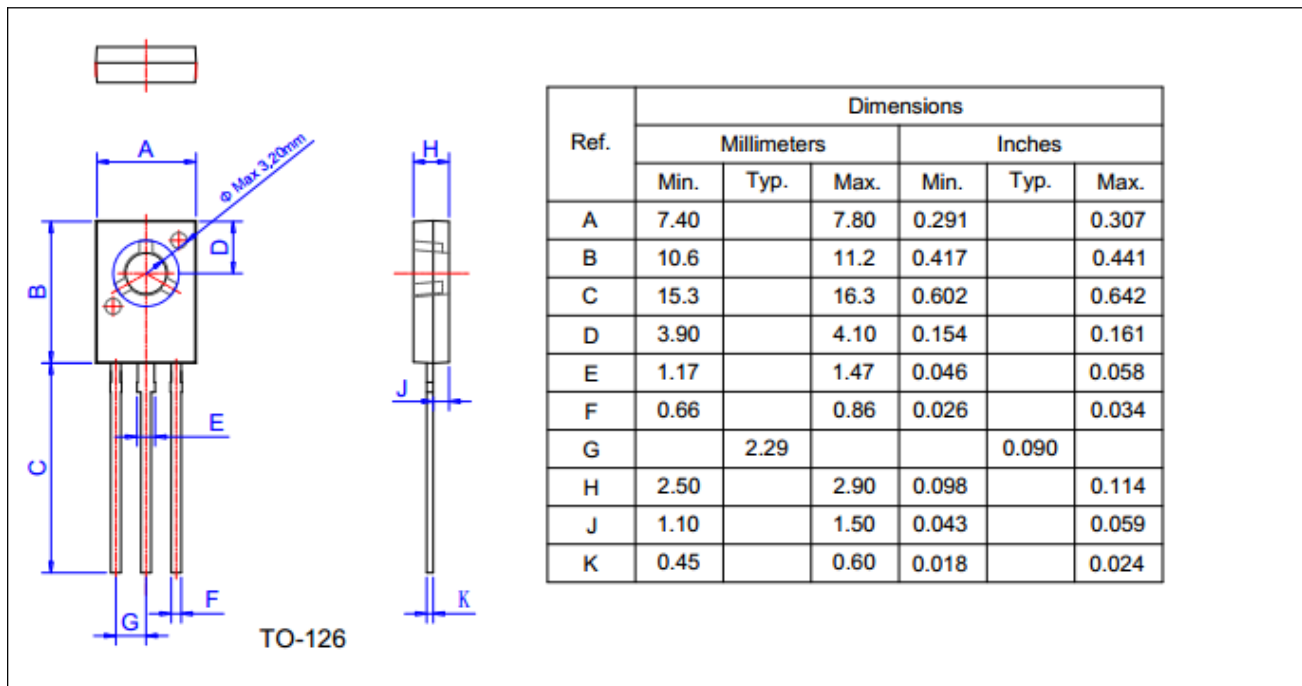




FIG. 1 Maximum power dissipation versus RMS on-state current

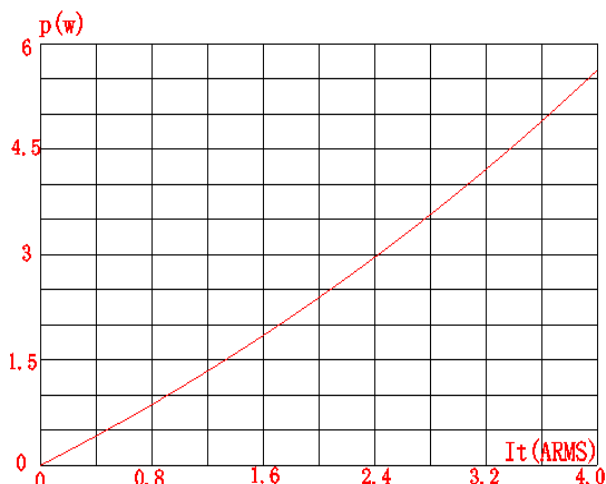


FIG. 3: Surge peak on-state current versus number of cycles

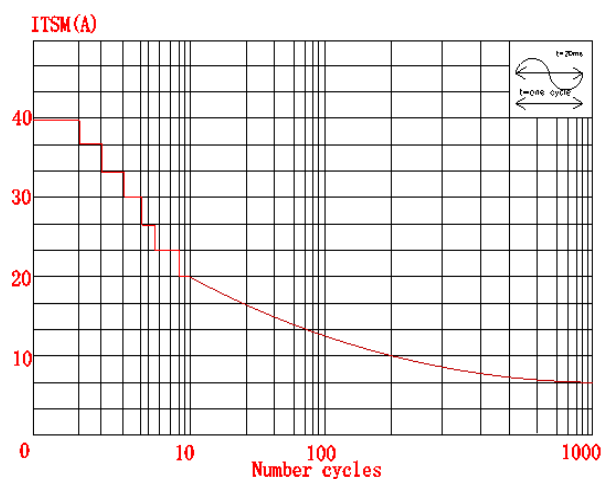
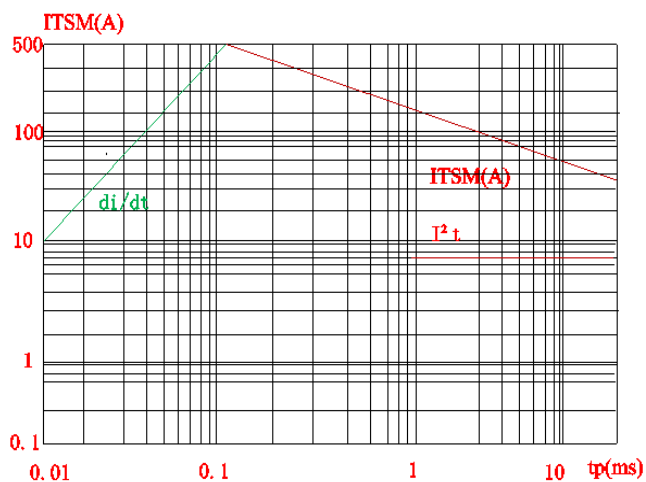
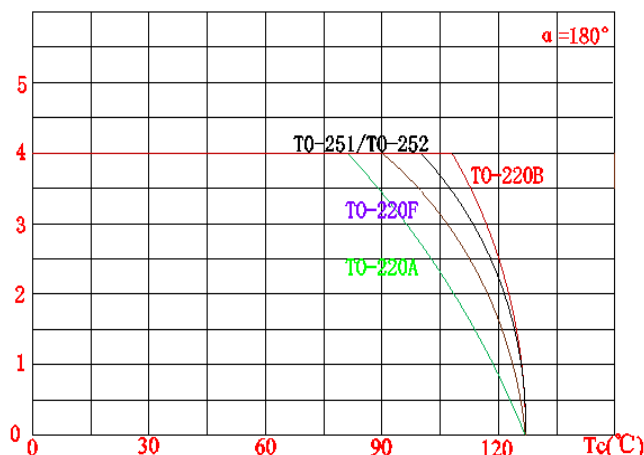
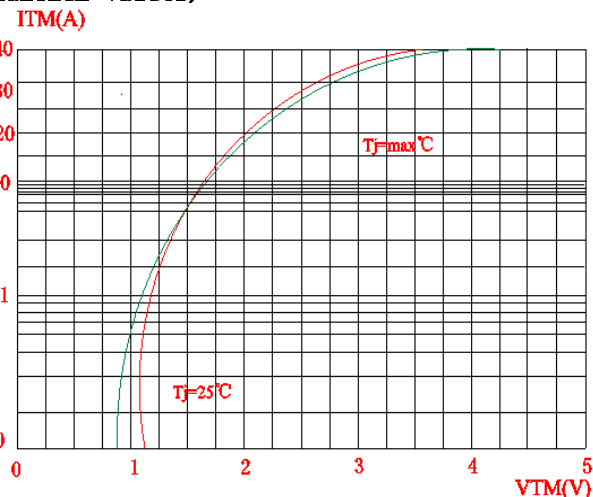
FIG. 5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of $I^2 t$ ($dI/dt < 50\text{A}/\mu\text{s}$)FIG. 2: RMS on-state current versus case temperature
 $I_T(\text{RMS})$ AFIG. 4: On-state characteristics (maximum values)
 I_{TM} (A)

FIG. 6: Relative variations of gate trigger current holding current and latching current versus junction temperature

