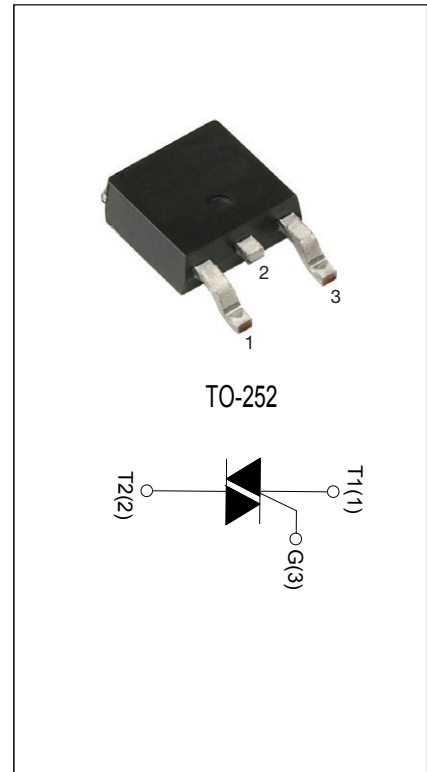


BT134-800SW-D
MAIN FEATURES 3Q TRIAC

Symbol	Value	Unit
$I_{T(RMS)}$	2	A
V_{DRM}/V_{RRM}	800	V
$I_{GT1/2/3/4}$	10/10/10	mA

DESCRIPTION:

The BT134-800SW-D triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Package TO-252 is RoHS compliant.


ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	$^{\circ}C$
Operating junction temperature range	T_j	+125	$^{\circ}C$
Repetitive peak off-state voltage ($T_j=25^{\circ}C$)	V_{DRM}	800	V
Repetitive peak reverse voltage ($T_j=25^{\circ}C$)	V_{RRM}	800	V
RMS on-state current ($T_c \leq 90^{\circ}C$)	$I_{T(RMS)}$	2	A
Non repetitive surge peak on-state current (full cycle , $t_p=20ms$, $T_j=25^{\circ}C$)	I_{TSM}	20	A
I^2t value for fusing ($t_p=10ms$, $T_j=25^{\circ}C$)	I^2t	2.6	A^2s
Critical rate of rise of on-state current ($T_j=125^{\circ}C$)	di/dt	50	$A/\mu s$
Peak gate current ($t_p=20\mu s$, $T_j=125^{\circ}C$)	I_{GM}	2	A
Average gate power dissipation ($T_j=125^{\circ}C$)	$P_{G(AV)}$	0.5	W

ELECTRICAL CHARACTERISTICS ($T_j=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12\text{V}$ $R_L=100\Omega$	I - II -III	MAX.	10	mA
V_{GT}		I - II -III	MAX.	1.5	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125^{\circ}\text{C}$ $R_L=100\Omega$	I - II -III	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	I -III	MAX.	15	mA
		II		30	
I_H	$I_T=500\text{mA}$		MAX.	15	mA
dV/dt	$V_D=2/3V_{DRM}$ $T_j=125^{\circ}\text{C}$		MIN.	5	V/ μs
$(dl/dt)_c$	$T_j=125^{\circ}\text{C}$		MIN.	10	A/ms

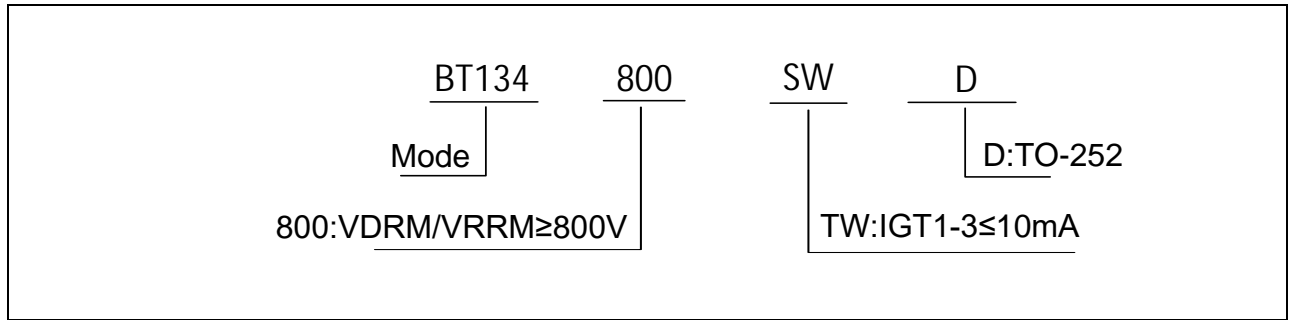
STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=5\text{A}$ $t_p=380\mu\text{s}$	$T_j=25^{\circ}\text{C}$	1.7	V
V_{TO}	Threshold voltage	$T_j=125^{\circ}\text{C}$	0.94	V
R_D	Dynamic resistance	$T_j=125^{\circ}\text{C}$	36.8	$\text{m}\Omega$
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25^{\circ}\text{C}$	5	μA
I_{RRM}		$T_j=125^{\circ}\text{C}$	1	mA

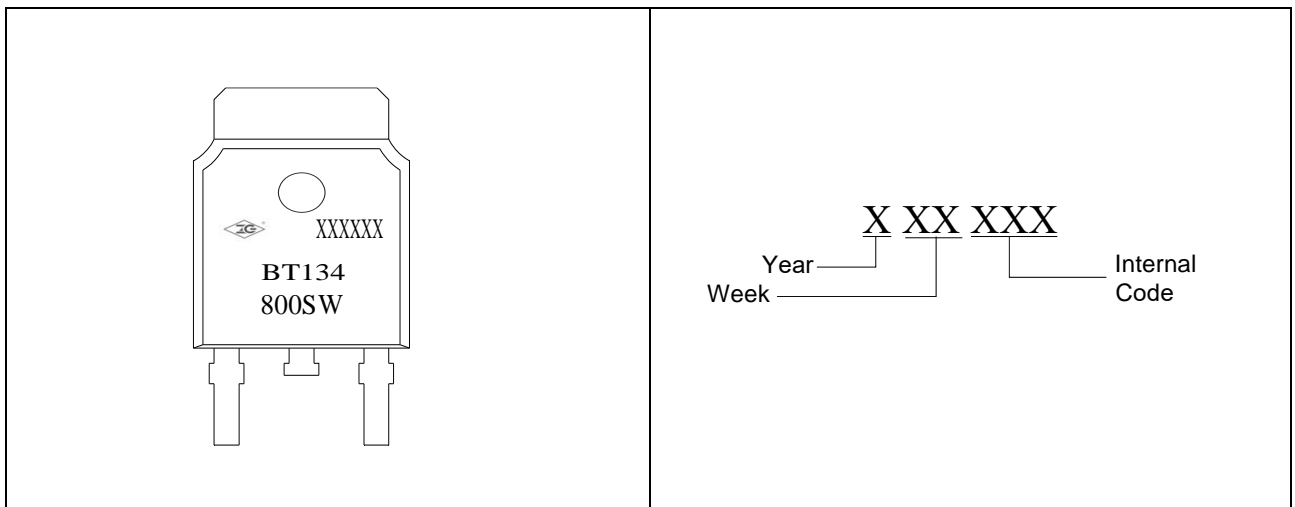
THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	11.3	$^{\circ}\text{C}/\text{W}$

ORDERING INFORMATION



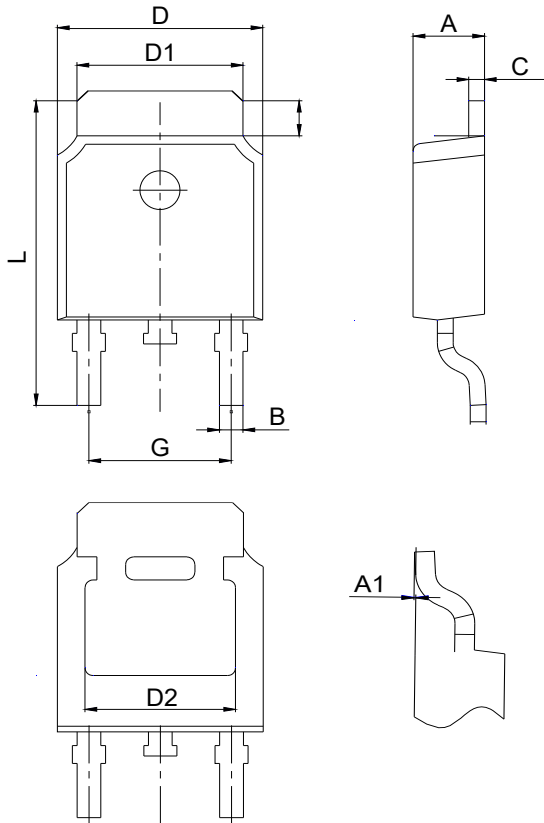
MARKING



ORDERING INFORMATION

Order code	Voltage V _{DRM} /V _{R_{RRM}} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		I -II-III			
BT134-800SW-D	800	10	TO-252	2500	REEL

PACKAGE MECHANICAL DATA



TO-252

Ref.	Dimensions		
	Milimeters		
	Min.	Typ.	Max.
A	2.10	2.30	2.50
A1	/	/	0.13
B	0.47	0.67	0.87
C	0.30	0.50	0.70
D	6.40	6.60	6.80
D1	5.13	5.33	5.53
D2	4.830REF		
G	4.37	4.57	4.77
L	9.80	10.00	10.20

PACKAGE	OUTLINE	REEL (PCS)	INNER BOX (PCS)	PER CARTON
TO-252	REEL	2500	5,000	54,000

FIG.1 Maximum power dissipation versus RMS state current

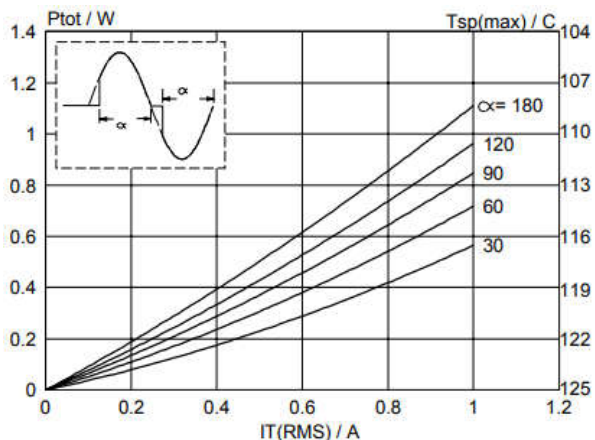


FIG.2: RMS on-state current versus case temperature

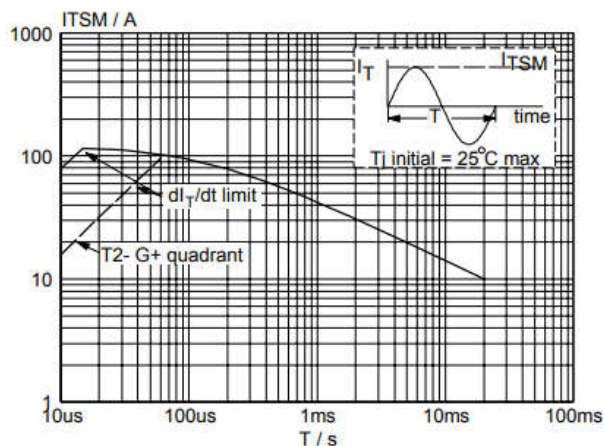


FIG.3: Surge peak on-state current versus

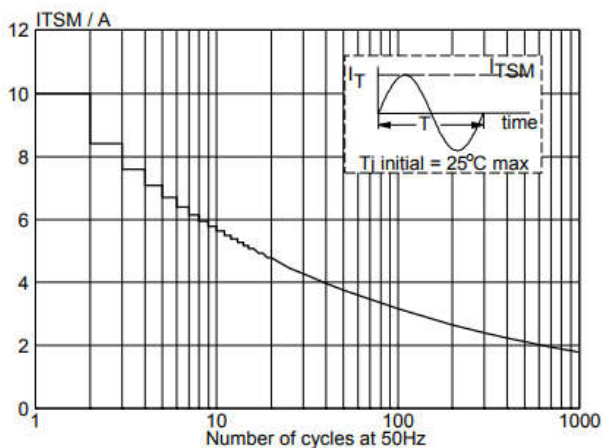


FIG.4: On-state characteristics

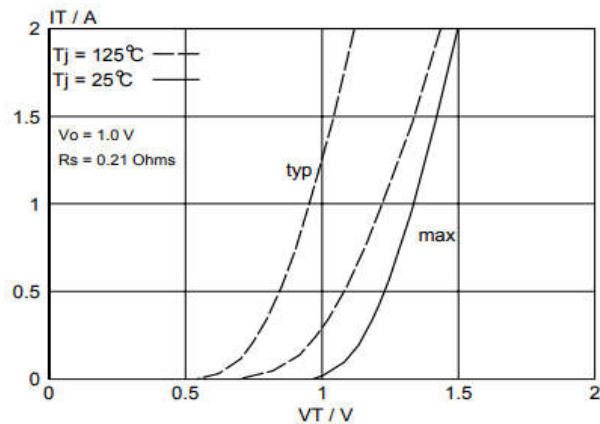


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width tp and value of It

(I II III di/dt<50A/μs;IV: di/dt<30A/μs)

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

