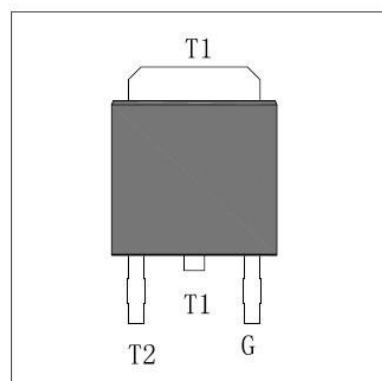


isc Thyristors**BT151S-800R****APPLICATIONS**

Mesa glass passivation technology;
 Have high blocking voltage and high temperature stability cleaner;
 Electric tools such as motor speed controller;
 Solid state relay;
 Heating controller (temperature);
 Other phase control circuit
 Minimum Lot-to-Lot variations for robust device performance and reliable operation

**ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)**

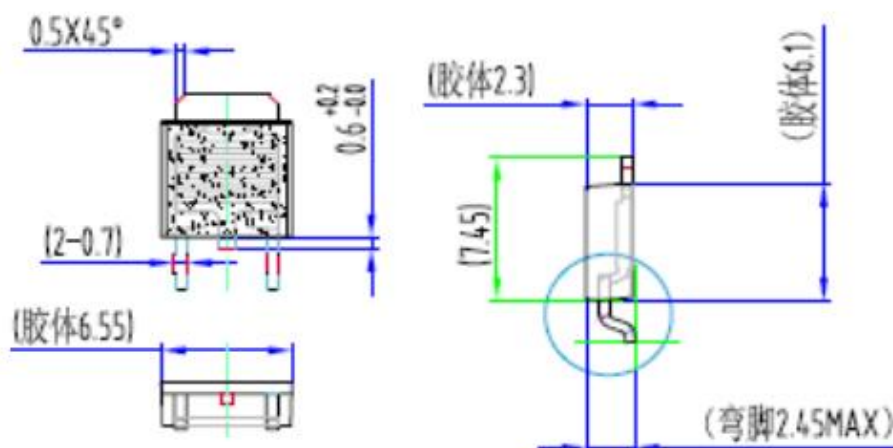
SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	800	V
V_{RRM}	Repetitive peak reverse voltage	800	V
$I_{\text{T(AV)}}$	On-state current $T_c=80^{\circ}\text{C}$	7.5	A
I_{TSM}	Surge non-repetitive on-state current , $T=10\text{ms}$	100	A
$P_{\text{G(AV)}}$	Average gate power	0.5	W
di/dt	Repetitive rate of rise of on-state current after triggering $T_j=125^{\circ}\text{C}$	50	A/us
I^2t	I^2t for fusing $t = 10 \text{ ms}$	50	A^2S
I_{GM}	Peak gate current $t_p=20\mu\text{s}$, $T_j=125^{\circ}\text{C}$	2	A
T_j	Operating Junction temperature	$-40 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage temperature	$-40 \sim +150$	$^{\circ}\text{C}$

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BT151S-800R

ELECTRICAL CHARACTERISTICS (TC=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RRM}=800V$, $T_j=125^\circ C$	--	--	0.5	mA
I_{DRM}	Repetitive peak off-state current	$V_{DRM}=800V$, $T_j=125^\circ C$	--	--	0.5	mA
V_{TM}	On-state voltage	$I_{TM}=24A$	--	--	1.5	V
I_{GT}	Gate-trigger current	$V_D=12V$; $R_L=100\Omega$	--	--	15	mA
V_{GT}	Gate-trigger voltage	$V_D=12V$; $R_L=100\Omega$	--	--	1.5	V
I_H	Holding current	$I_T=0.5A$	--	--	30	mA
dv/dt	Critical rate of rise of off-state voltage	$V_D=0.67V_{DRM}$ $T_j=125^\circ C$	200	--	--	V/us
$R_{th(j-c)}$	Thermal resistance junction to mounting base	in free air	--	1.75	--	$^\circ C/W$

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