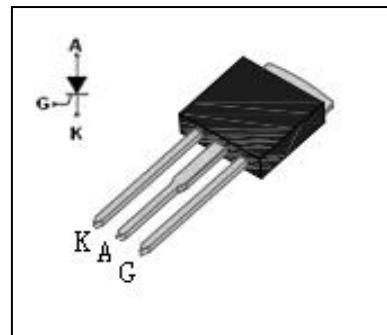


P/N: YZPST-BT151U SCR

● Package

TO-251



● Main Feature (Tj=25°C)

Symbol	Value	Unit
I _T (RMS)	12	A
V _{DRM} / V _{RRM}	600/800	V
I _{GT}	2 to 15	mA

● Absolute ratings (Limiting Values)

Symbol	Parameter	Value	Unit
I _T (RMS)	RMS on-state current (180° conduction angle)	12	A
I _{T(AV)}	AV on-state current (180° conduction angle)	7.5	A
I _{TSM}	Non repetitive surge peak on-state Current (tp=10ms)	100	A
I ² t	(tp=10ms)	50	A ² S
I _{GM}	Peak gate current(tp=20us)	2	A
P _{GM}	Peak gate power	5	W
P _{G(AV)}	Average gate power	0.5	W
T _{stg}	Storage temperature	-40--+150	°C
T _j	Operating junction temperature	-40--+125	°C

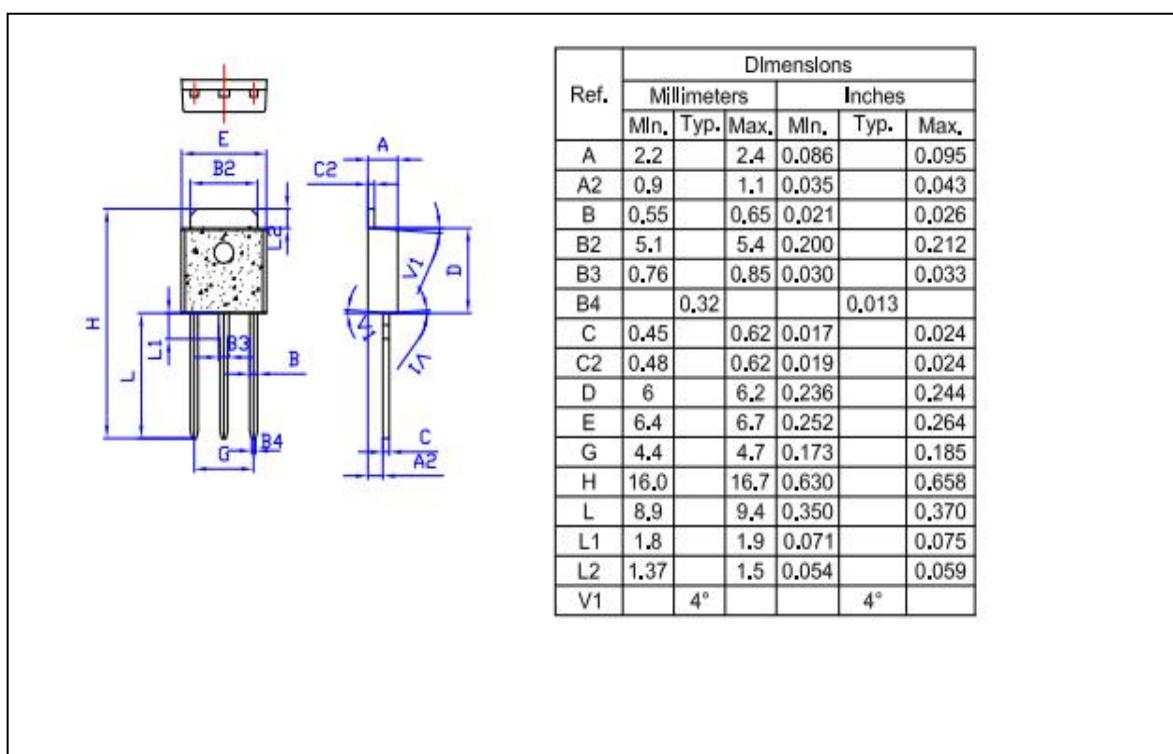
● Thermal Resistances

Symbol	Parameter	Value	Unit
R _{th} (j-c)	Junction to case	1.3	K/W
R _{th} (j-a)	Junction to ambient	60	K/W

●Electrical characteristics ($T_j=25^\circ\text{C}$ unless otherwise stated)

Symbol	Test Conditions	Value			Unit
		Min	Type	Max	
I_{GT}	$V_D=6\text{V}, R_L=100\ \Omega$	2	5	15	mA
V_{GT}	$V_D=12\text{V}, R_L=100\ \Omega$	----	0.7	0.8	V
V_{GD}	$V_D=V_{DRM}, R_L=3.3\text{K}\ \Omega, T_j=110^\circ\text{C}$	0.2	----	----	V
I_H	$I_T=100\text{mA}$ Gate Open	----	9	20	mA
dV/dt	$V_D=67\%V_{DRM}$, GateOpen, $T_j=125^\circ\text{C}$	200	----	----	v/ μs
V_{TM}	$I_T=16\text{A}, t_p=380\ \mu\text{s}$	----	----	1.7	V
I_{DRM}	$V_D=V_{DRM}$	----	----	10	uA
I_{RRM}	$V_R=V_{RRM}$	$T_j=125^\circ\text{C}$	----	----	1 mA

●Measure of package
(TO-251 型)



● Electrocircuit:

