

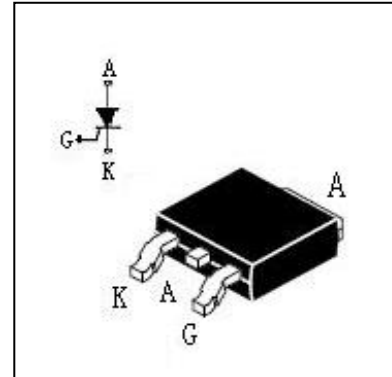
P/N: YZPST-BT151S **SCRs**

● **Package**

TO-252-2L

● **Main Feature (Tj=25°C)**

Symbol	Value	Unit
$I_{T(AV)}$	7.5	A
V_{DRM} / V_{RRM}	≥ 600	V
I_{GT}	3to 6	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^2t	(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
Tstg	Storage temperature	-40--+150	°C
Tj	Operating junction temperature	-40--+125	

● **Thermai Resistances**

Symbol	Parameter	Value	Unit
Rth (j-mb)	Junction to case	2.0	K/W
Rth (j-a)	Junction to ambient	75	K/W

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

Symbol	Test Conditions	Value			Unit	
		Min	Type	Max		
I _{GT}	V _D =6V, R _L =100 Ω	3	5	6	uA	
V _{GT}	V _D =12V, R _L =100 Ω	-----	0.7	0.8	V	
V _{GD}	V _D =V _{DRM} , R _L =3.3K Ω T _j =110°C	0.2	-----	-----	V	
I _H	I _T =100mA Gate Open	-----		10	mA	
I _L	I _G =1.2I _{GT}			20	mA	
dV/dt	V _D =67%V _{DRM} , GateOpen, T _j =125°C	50	125	-----	v/ μ s	
V _{TM}	I _T =16A, t _p =380 μ s	-----	-----	1.6	V	
I _{DRM}	V _D =V _{DRM}				10	μA
					500	μA
I _{RRM}	V _R =V _{RRM}	T _j =25°C	-----	-----	10	μA
		T _j =125°C	-----	-----	500	μA

● Measure of package (TO-220E)

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP.		0.091 TYP.	
e1	4.500	4.700	0.177	0.185
L	9.500	9.900	0.374	0.390
L1	2.550	2.900	0.100	0.114
L2	1.400	1.780	0.055	0.070
L3	0.600	0.900	0.024	0.035
V	3.800 REF.		0.150 REF.	

●Electrocircuit:

