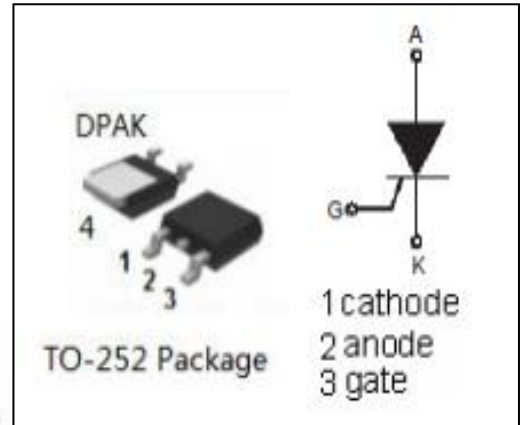


isc Thyristors
BT150S-600R
DESCRIPTION

- With TO-252 packaging
- Long-term stability
- Thyristor for line frequency
- Planar passivated chip
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching applications
- Line rectifying 50/60 Hz


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

SYMBOL	PARAMETER	MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage	600	V
V_{RRM}	Repetitive peak reverse voltage	600	V
$I_{\text{T(AV)}}$	Average forward current	2.5	A
$I_{\text{T(RMS)}}$	RMS on-state current	4	A
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle, half sine wave)	50Hz 35 60Hz 38	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20ms period)	0.5	W
T_j	Operating junction temperature	-40~125	$^{\circ}\text{C}$
T_{stg}	Storage temperature	-40~150	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$ $V_{\text{DM}}=V_{\text{DRM}}$ $T_j=125^{\circ}\text{C}$		0.5	mA
I_{DRM}	Repetitive peak off-state current				
V_{TM}	On-state voltage	$I_{\text{TM}}=5\text{A}$		1.8	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$		0.2	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$		1.5	V
$R_{\text{th(j-mb)}}$	Thermal resistance	Junction to mounting base		3.0	$^{\circ}\text{C/W}$