

## isc Thyristors

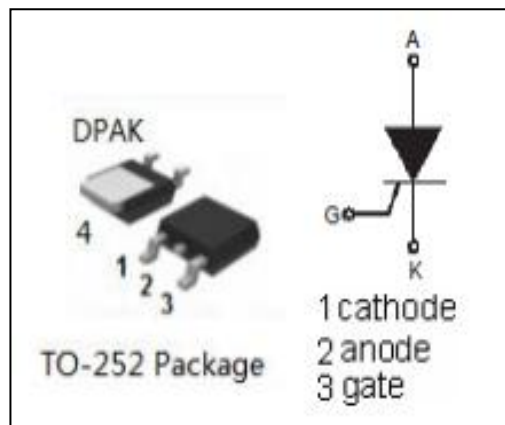
## BT150S-600R

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

**isc Thyristors**

**BT150S-600R**

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>RM</sub> =V <sub>RRM</sub> V <sub>DM</sub> =V <sub>DRM</sub>	T <sub>j</sub> =125°C		0.5	mA
I <sub>DRM</sub>	Repetitive peak off-state current					
V <sub>TM</sub>	On-state voltage	I <sub>TM</sub> = 5A			1.8	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> = 12V; I <sub>T</sub> =0.1A			0.2	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> = 12V; I <sub>T</sub> =0.1A			1.5	V
R <sub>th(j-mb)</sub>	Thermal resistance	Junction to mounting base			3.0	°C/W

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