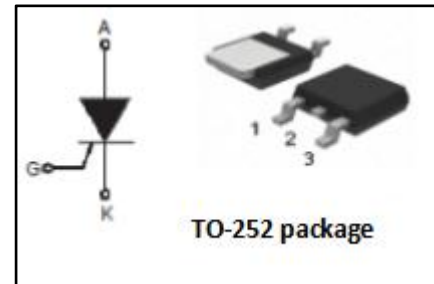


isc Thyristors
BT150SK-600R
APPLICATIONS

- It is suitable to fit all modes of control found in applications such as over-voltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- 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	600	V
V_{RRM}	Repetitive peak reverse voltage	600	V
$I_{\text{T(AV)}}$	Average on-state current	2.5	A
$I_{\text{T(RMS)}}$	RMS on-state current	4	A
I_{TSM}	Surge non-repetitive on-state current	35	A
$P_{\text{G(AV)}}$	Average gate power dissipation	0.5	W
	over any 20 ms period		
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)

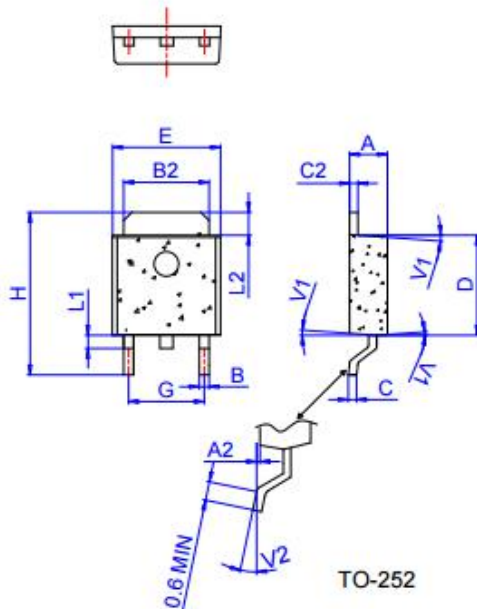
SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$	$T_j=25^\circ\text{C}$		5	μA
			$T_j=125^\circ\text{C}$		0.5	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$	$T_j=25^\circ\text{C}$		5	μA
			$T_j=125^\circ\text{C}$		0.5	mA
V_{TM}	On-state voltage	$I_{\text{T}}=5\text{A}$			1.8	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$			200	μA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$			1	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case			6.5	$^\circ\text{C/W}$

K: $V_{\text{GT (MAX)}}:1\text{V}$

isc Thyristors

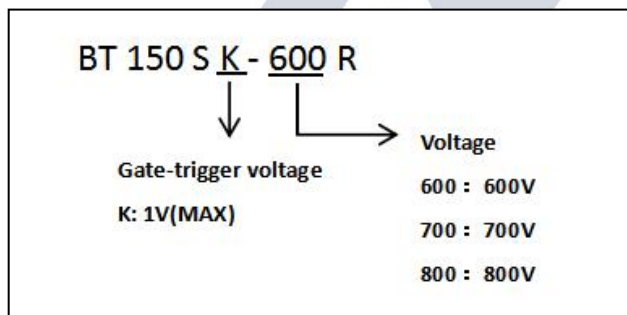
BT150SK-600R

PACKAGE DIMENSIONAL DRAWING



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.03		0.23	0.001		0.009
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G	4.40		4.70	0.173		0.185
H	9.35		10.6	0.368		0.417
L1	1.30		1.70	0.051		0.067
L2	1.37		1.50	0.054		0.059
V1		4°			4°	
V2	0°		8°	0°		8°

MARKING CODE


NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.