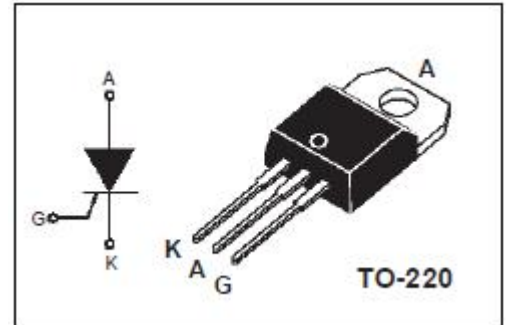


isc Thyristors
BT152-400R
APPLICATIONS

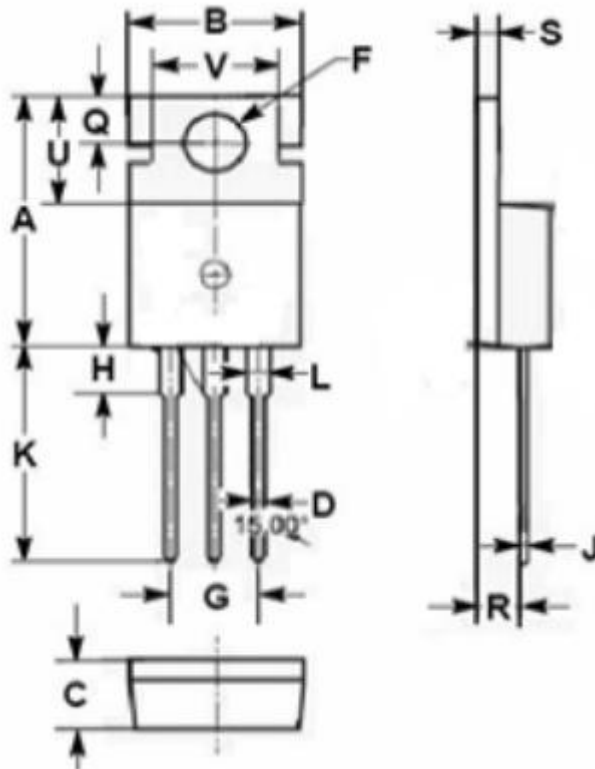
- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust 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	450	V
V_{RRM}	Repetitive peak reverse voltage	450	V
$I_{\text{T(AV)}}$	Average on-state current	13	A
$I_{\text{T(RMS)}}$	RMS on-state current	20	A
I_{TSM}	Surge non-repetitive on-state current, $T_P=10\text{ms}$	200	A
$P_{\text{G(AV)}}$	Average gate power dissipation over any 20 ms 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	$V_{\text{RM}}=V_{\text{RRM}}$, $T_j=125^{\circ}\text{C}$		1	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$, $T_j=125^{\circ}\text{C}$		1	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=40\text{A}$		1.75	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}$; $I_{\text{T}}=0.1\text{A}$		32	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}$; $I_{\text{T}}=0.1\text{A}$		1.5	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		1.1	$^{\circ}\text{C}/\text{W}$

isc Thyristors
BT152-400R
Package outline


DIM	mm		
	MIN	TYP.	MAX
A	15.50	15.70	15.90
B	9.80	10.00	10.20
C	4.20	4.35	4.50
D	0.70	0.80	0.90
F	3.40	3.55	3.70
G	4.98	5.08	5.18
H	2.68	2.79	2.90
J	0.44	0.52	0.60
K	12.80	13.10	13.40
L	1.20	1.32	1.45
Q	2.70	2.80	2.90
R	2.30	2.50	2.70
S	1.29	1.32	1.35
U	6.45	6.55	6.65
V	8.66	8.76	8.86

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