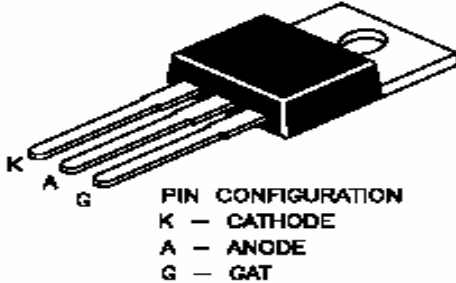


**THYRISTOR**

**BT152- 600R**

**TO-220  
Plastic Package**



For use in Applications Requiring High Bidirectional Blocking Voltage Capability and High Thermal Cycling Performance Typical Applications include Motor Control, Industrial and Domestic Lighting, Heating and Static Switching

**ABSOLUTE MAXIMUM RATINGS**

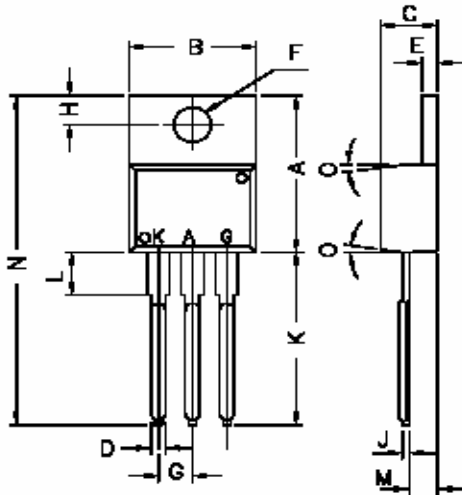
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Off State Voltage	$V_{DRM}, V_{RRM}$	600	V
Average On State Current	$I_T (AV)$	13	A
RMS On State Current	$I_T (RMS)$	20	A
Non Repetitive Peak On State Current	$I_{TSM}$	200	A
$I^2t$ for Fusing	$I^2t$	200	A <sup>2</sup> s
Repetitive Rate of Rise of On State Current After Triggering	di/dt	200	A/μs
Peak Gate Current	$I_{GM}$	5.0	A
Peak Gate Power	$P_{GM}$	20	W
Average Gate Power	$P_G (AV)$	0.5	W
Storage Temperature	$T_{stg}$	- 40 to +150	°C
Operating Junction Temperature	$T_j$	125	°C

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

PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Gate Trigger Current	$I_{GT}$	$V_D=12V, I_T=0.1A$		32	mA
Gate Trigger Voltage	$V_{GT}$	$V_D=12V, I_T=0.1A$		1.5	V
Latching Current	$I_L$	$V_D=12V, I_{GT}=0.1A$		80	mA
Holding Current	$I_H$	$V_D=12V, I_{GT}=0.1A$		60	mA
On State Voltage	$V_{TM}$	$I_T=40A$		1.75	V
Off State Leakage Current	$I_{DRM}, I_{RRM}$	$V_{DRM}=V_{RRM}=600V T_J=125^\circ\text{C}$		5.0	mA

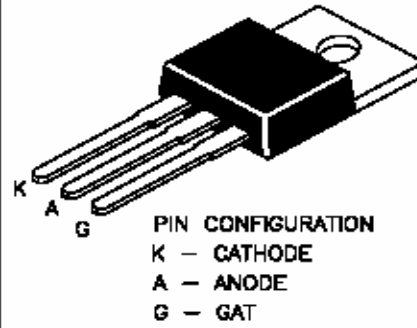
BT152\_600R Rev251104E

TO-220 Plastic Package

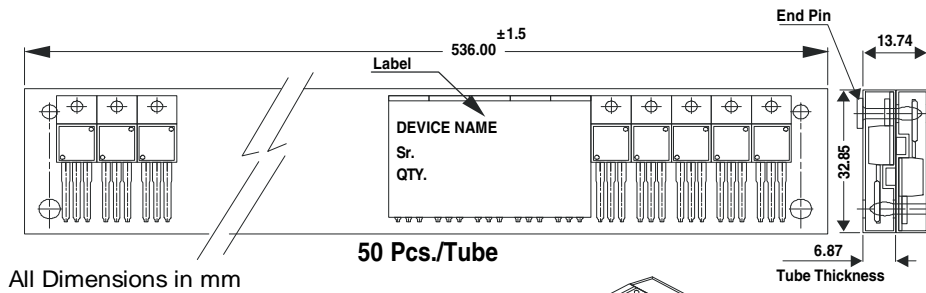


DIM	MIN	MAX
A	14,42	16,51
B	9,63	10,67
C	3,56	4,83
D	—	0,90
E	1,15	1,40
F	3,75	3,88
G	2,29	2,79
H	2,54	3,43
J	—	0,56
K	12,70	14,73
L	2,80	4,07
M	2,03	2,92
N	—	31,24
O	7 DEG	

ALL DIMENSIONS IN mm



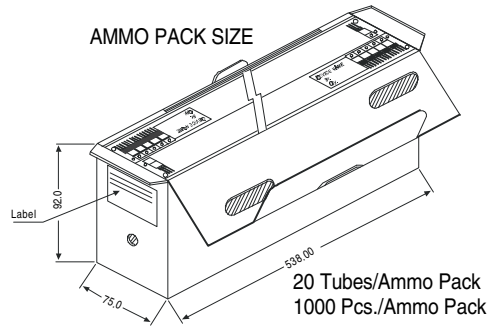
TO-220 Tube Packing



All Dimensions in mm

50 Pcs./Tube

AMMO PACK SIZE



Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/ Qty	Size	Qty	Size	Qty	Gr Wt
TO-220	200 pcs/polybag	396 gm/ 200 pcs	3" x 7.5" x 7.5"	1.0K	17" x 15" x 13.5"	16.0K	36 kgs
	50 pcs/tube	120 gm/ 50 pcs	3.5" x 3.7" x 21.5"	1.0K	19" x 19" x 19"	10.0K	29 kgs

### **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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