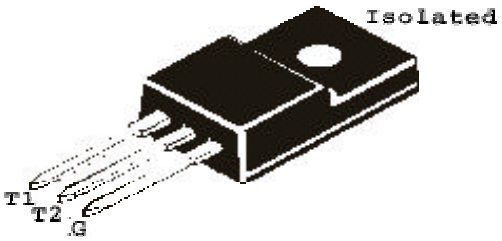
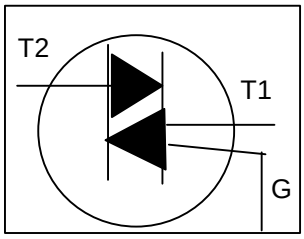
TRIAC
Sensitive Gate

BT138X - 600E

TO-220FP Fully Isolated Plastic Package





For use in high bi-directional transient and blocking voltage applications, and for high thermal cycling performance. Typical applications include Motor Control, Industrial and Domestic Lighting, Heating and Static Switching.

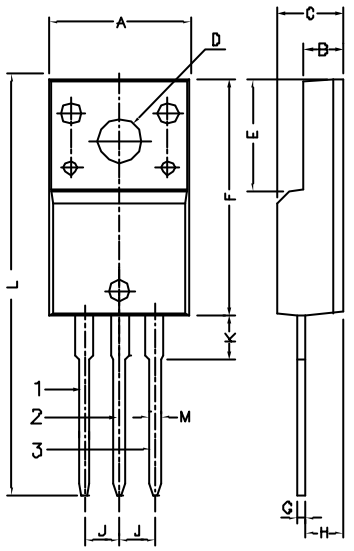
ABSOLUTE MAXIMUM RATINGS (T_a=25ºC)

PARAMETER	SYMBOL	VALUE	UNIT
Peak Repetitive Forward and Reverse Voltages	V_{DRM} and V_{RRM}	600	V
RMS on State Current	$I_{T\ (RMS)}$	12	A
Non Repetitive Peak on State Current	I_{TSM}	95	A
Junction Temperature	T_j	110	ºC
Storage Temperature Range	T_{stg}	- 40 ~ 150	ºC

ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

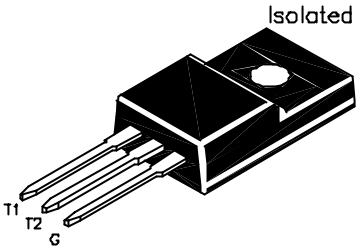
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Peak Repetitive Forward and Reverse Voltages	V_{DRM} and V_{RRM}	I_D=0.1mA	600		V
Holding Current	I_H	I_T=100mA		30	mA
On State Voltage	V_{TM}	I_T=15A		1.7	V
Gate Trigger Current	I_{GT}	V_D=12V, R_L=30Ω	1	3	mA
	I_{GT}	V_D=12V, R_L=30Ω	3	5	mA
	I_{GT}	V_D=12V, R_L=30Ω	5	8	mA
	I_{GT}	V_D=12V, R_L=30Ω	8	10	mA

TO-220FP FULLY ISOLATED PLASTIC PACKAGE

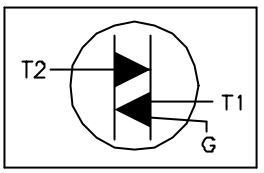


DIM	MIN	MAX
A	9.80	10.36
B	2.50	3.00
C	4.30	4.90
D	3.10	3.40
E	6.50	8.20
F	14.80	17.27
G	0.40	0.70
H	2.50	2.96
J	2.34	2.74
K	–	4.70
L	–	30.05
M	0.60	0.90

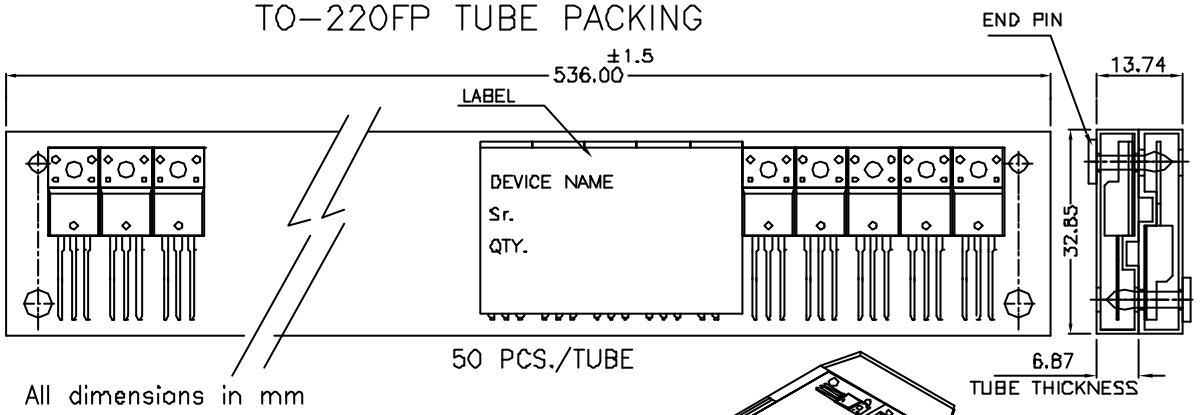
All dimensions in mm



Pin Configuration
1. Main Terminal 1
2. Main Terminal 2
3. Gate
Case Isolated



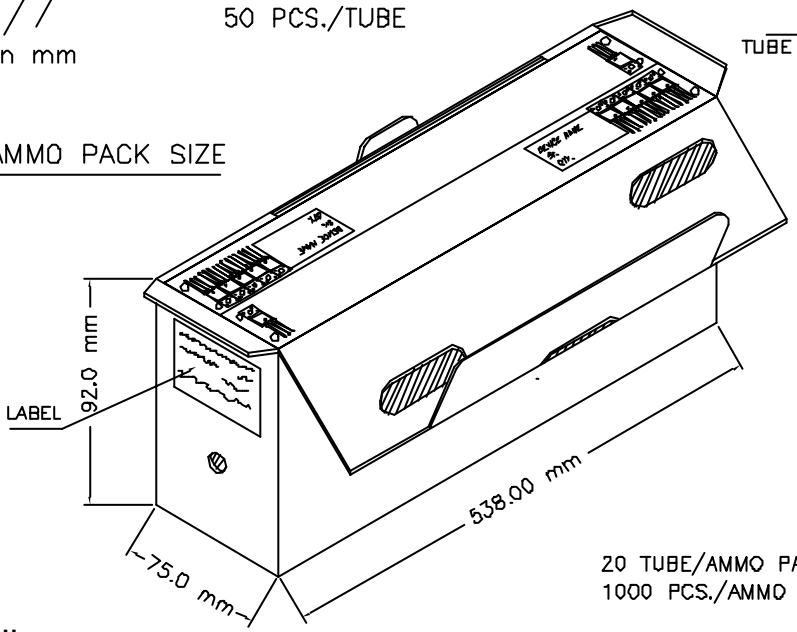
TO-220FP TUBE PACKING



50 PCS./TUBE

All dimensions in mm

AMMO PACK SIZE



20 TUBE/AMMO PACK
1000 PCS./AMMO BOX

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty.	Size	Qty.	Size	Qty.	Gr. wT
TO-220 FP	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

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.

2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's 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 Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems 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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