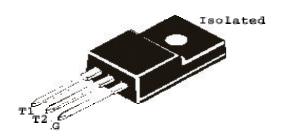


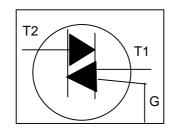




An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

TRIAC BT136X-600E





TO-220FP Fully Isolated Plastic Package

For use in high bidirectional 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**

PARAMETER	SYMBOL	VALUE	UNIT	
Repetitive Peak Off State Voltage	$V_{DRM}$	600	V	
RMS on State Current	I <sub>T (RMS)</sub>	4.0	А	
Non Repetitive Peak on State Current	I <sub>TSM</sub>	25	А	
I <sup>2</sup> t for Fusing	l <sup>2</sup> t	3.1	A <sup>2</sup> s	
Repetitive Rate of Rise of On State Current After Triggering	dl <sub>⊤</sub> /dt	50	A/μs	
Peak Gate Current	I <sub>GM</sub>	2.0	А	
Peak Gate Power	P <sub>G M</sub>	5.0	W	
Average Gate Power	P <sub>G (AV)</sub>	0.5	W	
Storage Temperature	T <sub>stg</sub>	- 40 to 150	°C	
Operating Junction Temperature	T <sub>i</sub>	125	°C	

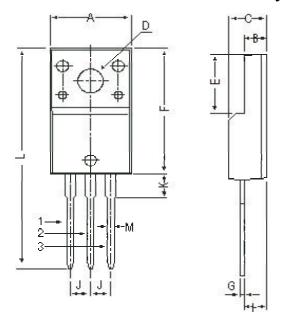
### ELECTRICAL CHARACTERISTICS (T<sub>.1</sub>=25°C unless specified otherwise)

PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Gate Trigger Current	I <sub>GT</sub>	V <sub>D</sub> =12V, I <sub>T</sub> =0.1A			
				10	mΑ
				10	mΑ
			I	10	mΑ
			/	25	mΑ
Holding Current	I <sub>H</sub>	$V_D = 12V, I_{GT} = 0.1A$		20	mA
Gate Trigger Voltage	$V_{GT}$	$V_D = 12V, I_T = 0.1A$		1.5	V
On State Voltage	$V_{T}$	I <sub>T</sub> =5A		1.7	V
Off State Leakage Current	I <sub>D</sub>	V <sub>DRM</sub> =600V		0.5	mA

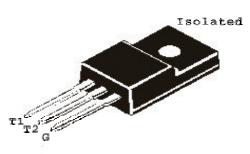
BT136X\_600ERev021104E

# **TO-220FP Fully Isolated Plastic Package**

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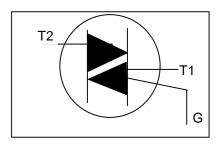
DIM	MIN	MAX
А	9.96	10.36
В	2.60	3.00
С	4.50	4.90
D	3.10	3.30
Е	7.90	8.20
F	16.37	17.27
G	0.45	0.50
Н	2.56	2.96
J	2.34	2.74
К	<b>∦</b> — ∣	3.08
L	-	30.05
М	80—38	0.80
All dimins	ions in mr	n.



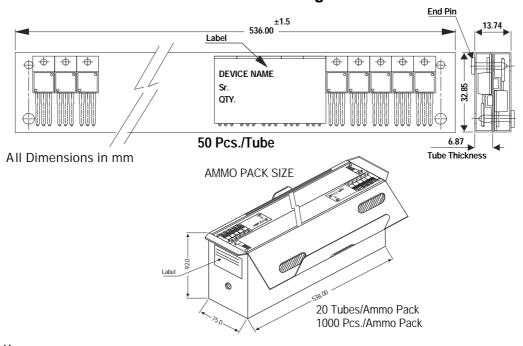
Pin Configuration

- 1. Main Terminal 1
- 2. Main Terminal 2
- 3 Cate

Case Isolated



## **TO-220 Tube Packing**



## Packing Detail

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

Customer Notes BT136X-600E

TO-220FP Fully Isolated Plastic Package

#### **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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