

BT136F

TO-220F

Triac Series

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	V_{DRM}, V_{RRM}	600	V	
on-state RMS current	$I_T(RMS)$	4	A	$T_L \leq 66^\circ C$
NON repetitive surge peak on-state current	I_{TSM}	25	A	$T_p=20ms, T_j=25^\circ C$
critical rate of rise on-state current	$di/dt (Q_{1-3})$	50	A/ μs	$I_{TM}=20A, T_G=0.2A$
peak gate current	I_{GM}	2	A	
average gate power dissipation	$P_G(AV)$	0.5	W	
storage temperature range	T_{stg}	-40 to +150	$^\circ C$	
operating junction temperature range	T_j	125	$^\circ C$	

Electrical characteristics ($T_j=25^\circ C$) unless otherwise specified

Parameter	Symbol	Value	Unit	Test condition
gate trigger current	I_{GT}	≤ 10	mA	T2+G+ $V_D=12V, I_T=0.1A$
		≤ 10	mA	T2+G- $V_D=12V, I_T=0.1A$
		≤ 10	mA	T2-G- $V_D=12V, I_T=0.1A$
		≤ 25	mA	T2-G+ $V_D=12V, I_T=0.1A$
gate trigger voltage	V_{GT}	≤ 1.5	V	$V_D=12V, I_T=0.1A$
hold current	I_H	≤ 30	mA	$V_D=12V, I_T=0.1A$
critical rate of rise off-state voltage	dv/dt	≥ 50	V/ μs	$V_D=67\%V_{DRM}$
on-state voltage	V_{TM}	≤ 1.7	V	$I_T=5A$
off-state leakage current	I_{DRM}	≤ 0.5	mA	$V_D=V_{DRM}; T_j=125^\circ C$
thermal resistance	$R_{th(j-a)}$	60	$^\circ C/W$	
	$R_{th(j-c)}$	≤ 3.7		

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.

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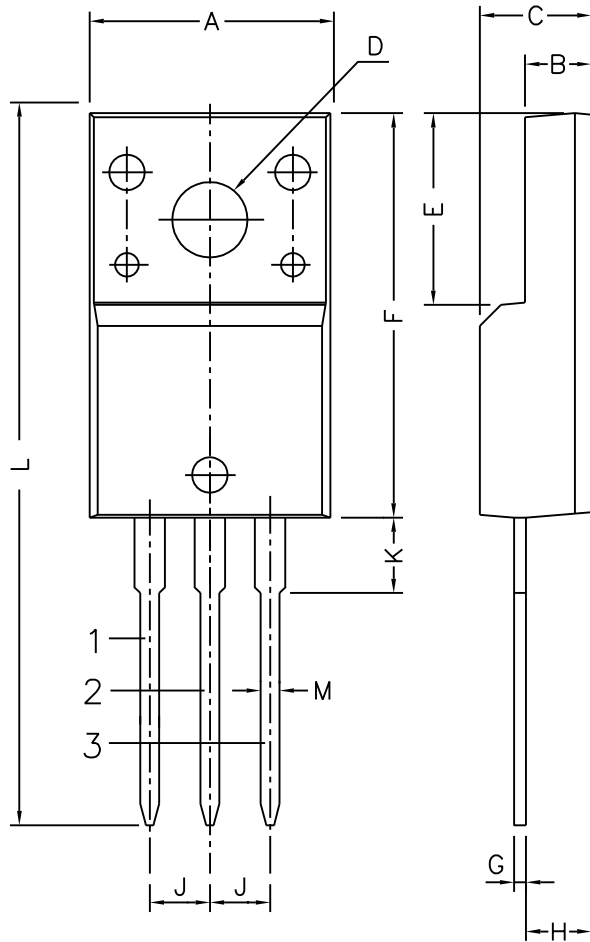
C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119

email@cdil.com www.cdilsemi.com

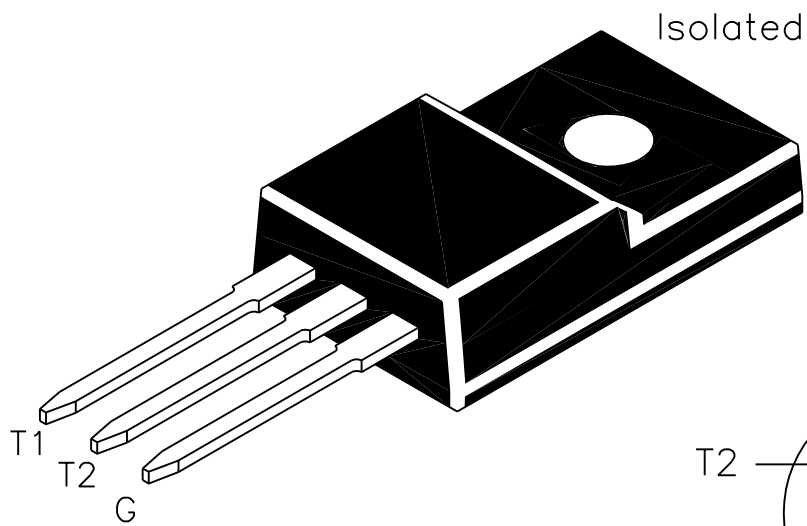
BT136F Rev270310E

PACKAGE TO-220FP



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 ARE IN mm



PIN CONFIGURATION:—

1. Main Terminal 1
2. Main Terminal 2
3. Gate

Case Isolated

