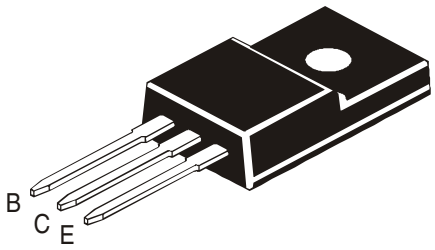
Continental Device India Limited

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

NPN SILICON POWER TRANSISTOR

CFC4662



TO-220FP Fully Isolated Plastic Package

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	500	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	10	V
RMS Isolation Voltage (for 1sec, R.H. <30%, T_a = 25°C)	** V_{ISOL} (a)	3500	V_{RMS}
	(b)	1500	V_{RMS}
Collector Current (DC)	I_C	5	A
Collector Current (Pulse)	I_C	10	A
Base Current	I_B	2	A
Power Dissipation upto T_c=25ºC	P_C	30	W
Junction Temperature	T_j	150	ºC
Storage Temperature	T_{stg}	- 55 to +150	ºC

**** RMS Isolation Voltage: (a) 3500 V_{RMS} with Package in Clip Mounting Position (b) 1500 V_{RMS} with Package in Screw Mounting Position (for 1sec, R.H.<30%, T_a=25°C; Pulse Test: Pulse Width ≤300µs, Duty Cycle≤2%)**

ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Cut Off Current	I_{CBO}	V_{CB}=500V, I_E=0		100	µA
Emitter Cut Off Current	I_{EBO}	V_{EB}=10V, I_C=0		100	µA
Collector Emitter Voltage	V_{CEO}	I_C=25mA, I_B=0	400		V
DC Current Gain	h_{FE}	I_C=1.5A, V_{CE}=4V	10	30	
Collector Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C=1.5A, I_B=0.3A		0.5	V
Base Emitter Saturation Voltage	$V_{BE\ (sat)}$	I_C=1.5A, I_B=0.3A		1.3	V
Transition Frequency	f_T	I_C=0.3A, V_{CE}=12V	TYP 20		MHz
Collector Capacitance	C_{ob}	I_E=0, V_{CB}=10V, f=1MHz	TYP 30		pF

SWITCHING TIMES

Turn On Time	t_{on}	V_{CC}=200V, R_L=133Ω,I_C=1.5A		1.0	µs
Storage Time	t_{stg}	V_{BB1}=10V,V_{BB2}= -5V		2.5	µs
Fall Time	t_f	I_{B1} =0.15A, I_{B2} = -0.3A		0.5	µs

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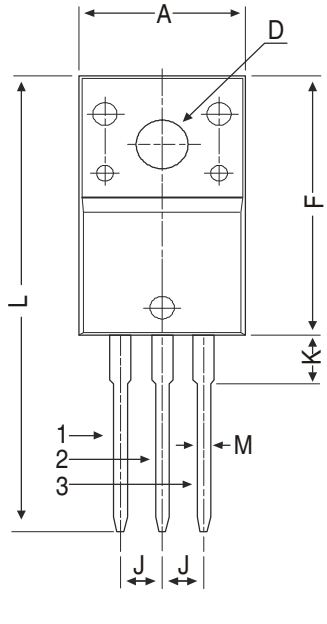
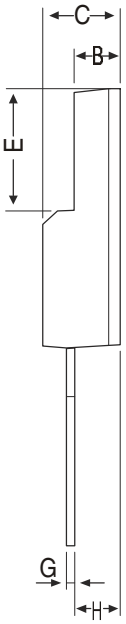
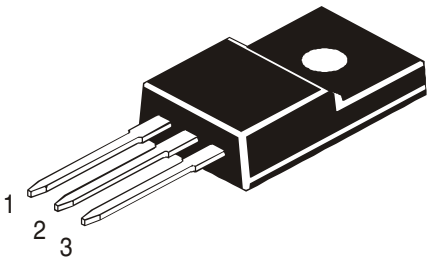




DIM	MIN	MAX
A	9.96	10.36
B	2.60	3.00
C	4.50	4.90
D	3.10	3.30
E	7.90	8.20
F	16.87	17.27
G	0.45	0.50
H	2.56	2.96
J	2.34	2.74
K	—	3.08
L	—	30.05
M	—	0.80

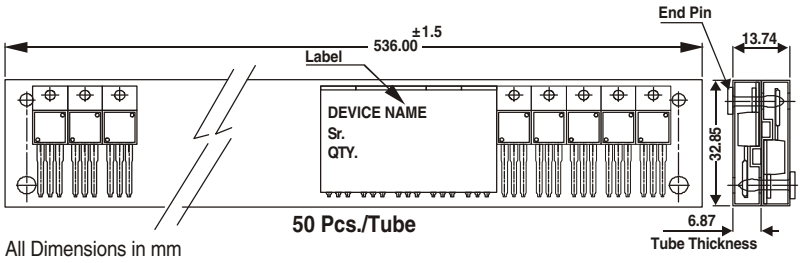
All diminsions in mm.



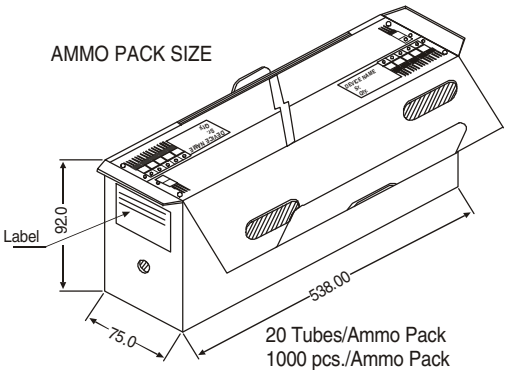
Pin Configuration

1. Base
2. Collector
3. Emitter

TO-220 FP Tube Packing

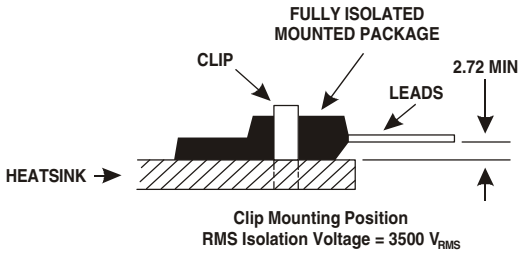


All Dimensions in mm

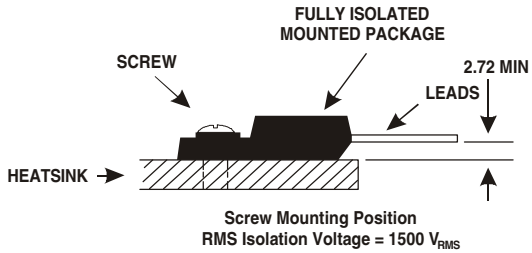


20 Tubes/Ammo Pack
1000 pcs./Ammo Pack

Mounting Option for TO-220FP



Clip Mounting Position
RMS Isolation Voltage = 3500 V_{RMS}



Screw Mounting Position
RMS Isolation Voltage = 1500 V_{RMS}

All dimensions in mm

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-220FP	200 pcs/polybag	396 gm/200 pcs	3" x 7.5" x 7.5"	1K	17" x 15" x 13.5"	16K	36 kgs
	50 pcs/tube	135 gm/50 pcs	3.5" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	28 kgs

TO-220FP Fully Isolated Plastic Package

Disclaimer

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