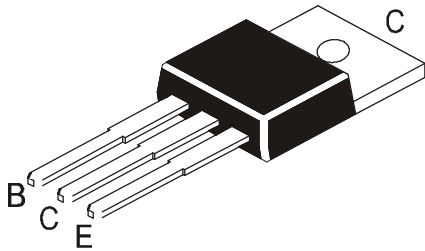


PLASTIC POWER TRANSISTORS

MJE2955T PNP
MJE3055T NPN

TO-220
Plastic Package



With excellent Safe Operating Area, ideal for Hi-Fi Amplifier and Switching Regulator Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Emitter Voltage	V_{CEO}	60	V
Collector Base Voltage	V_{CBO}	70	V
Emitter Base Voltage	V_{EBO}	5.0	V
Collector Current Continuous	I_C	10	A
Base Current	I_B	6.0	A
Power Dissipation upto $T_c=25^\circ\text{C}$ Derate above 25°C	P_D	75 0.6	W W/ $^\circ\text{C}$
Power Dissipation upto $T_a=25^\circ\text{C}$ Derate above 25°C	P_D	2.0 16	W mW/ $^\circ\text{C}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	- 55 to +150	$^\circ\text{C}$

THERMAL RESISTANCE

Junction to Case	$R_{th(j-c)}$	1.67	$^\circ\text{C/W}$
Junction to Ambient in free air	$R_{th(j-a)}$	62.5	$^\circ\text{C/W}$

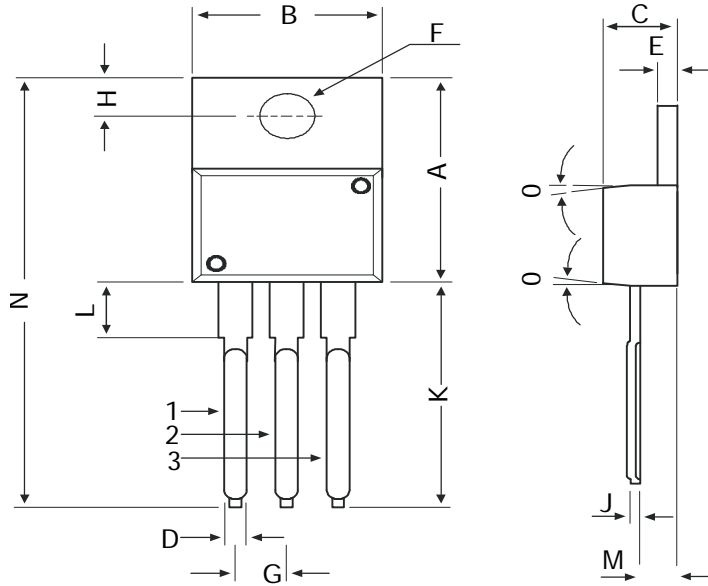
ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Emitter (sus) Voltage	$*V_{CEO(sus)}$	$I_C=200\text{mA}, I_B=0$	60		V
Collector Cut Off Current	I_{CEX}	$V_{CE}=70\text{V}, V_{EB(off)}=1.5\text{V}$ $V_{CE}=70\text{V}, V_{EB(off)}=1.5\text{V}, T_C=150^\circ\text{C}$		1.0 5.0	mA mA
Collector Cut Off Current	I_{CBO}	$V_{CB}=70\text{V}, I_E=0$ $V_{CB}=70\text{V}, I_E=0, T_C=150^\circ\text{C}$		1.0 10	mA mA
Collector Cut Off Current	I_{CEO}	$V_{CE}=30\text{V}, I_B=0$		0.7	mA
Emitter Cut Off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$		5.0	mA
DC Current Gain	$*h_{FE}$	$I_C=4\text{A}, V_{CE}=4\text{V}$ $I_C=10\text{A}, V_{CE}=4\text{V}$	20 5	100	
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=4\text{A}, I_B=400\text{mA}$ $I_C=10\text{A}, I_B=3.3\text{A}$		1.1 8.0	V V
Base Emitter On Voltage	$*V_{BE(on)}$	$I_C=4\text{A}, V_{CE}=4\text{V}$		1.8	V
Transition Frequency	f_T	$I_C=0.5\text{A}, V_{CE}=10\text{V}, f=500\text{KHz}$	2		MHz

*Pulse Test : Pulse width $\leq 300\text{ms}$, Duty Cycle $\leq 2\%$

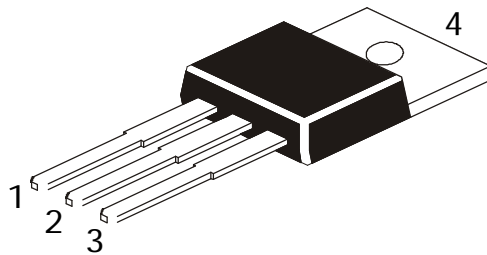
TO-220
Plastic Package

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	

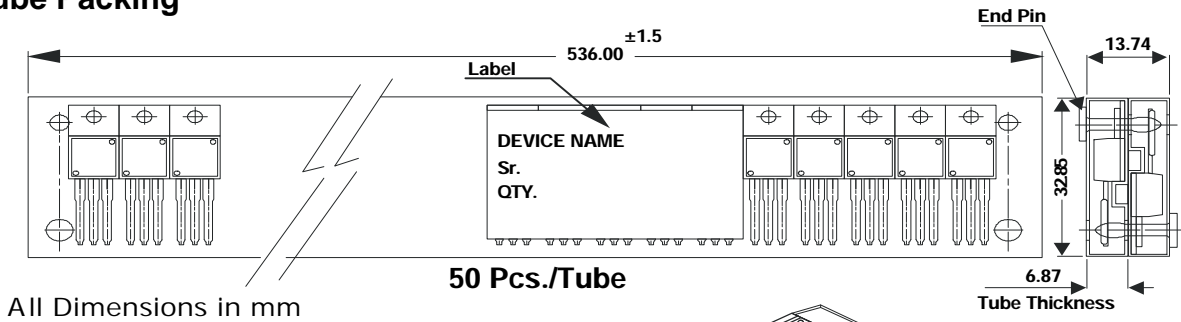
All dimensions in mm.



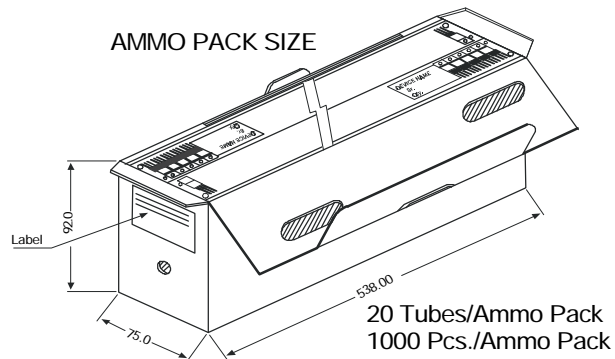
Pin Configuration

1. Base
2. Collector
3. Emitter
4. Collector

TO-220 Tube Packing



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-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

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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of
Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdilsemi.com