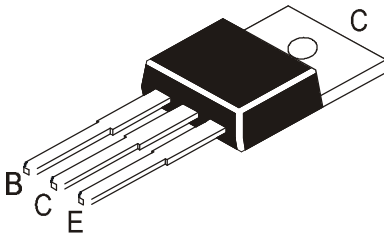


SILICON EPITAXIAL POWER TRANSISTORS

**MJE15032 NPN
MJE15033 PNP**

**TO - 220
Plastic Package**



High - Frequency Drivers in Audio Amplifier

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector- Base Voltage	V_{CBO}	250	V
Collector- Emitter Voltage	V_{CEO}	250	V
Emitter- Base Voltage	V_{EBO}	5	V
Collector Current Continuous	I_C	8	A
Peak		16	
Base Current	I_B	2	A
Power Dissipation $T_C=25^\circ\text{C}$	P_D	50	W
Derate Above 25°C		0.4	W/ $^\circ\text{C}$
Power Dissipation $T_A=25^\circ\text{C}$	P_D	2	W
Derate Above 25°C		0.016	W/ $^\circ\text{C}$
Operating & Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +150	$^\circ\text{C}$

Thermal Resistance

Thermal Ambient	$R_{th(j-a)}$	62.5	$^\circ\text{C/W}$
Junction to Case	$R_{th(j-c)}$	2.5	$^\circ\text{C/W}$

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector- Emitter Sustaining Voltage	$V_{CEO(sus)}$ *	$I_C=10\text{mA}, I_B=0$	250	-	-	V
Collector Cut Off Current	I_{CBO}	$V_{CB}=150\text{V}, I_E=0$	-	-	10	μA
Emitter Cut Off Current	I_{EBO}	$V_{BE}=5\text{V}, I_C=0$	-	-	10	μA
DC Current Gain	h_{FE} *	$I_C=0.5\text{A}, V_{CE}=5\text{V}$	50	-	-	
		$I_C=1.0\text{A}, V_{CE}=5\text{V}$	50	-	-	
		$I_C=2\text{A}, V_{CE}=5\text{V}$	10	-	-	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$ *	$I_C=1\text{A}, I_B=0.1\text{A}$	-	-	0.5	V
Base Emitter on Voltage	$V_{BE(on)}$ *	$I_C=1.0\text{A}, V_{CE}=5\text{V}$	-	-	1.0	V

Dynamic Characteristics

Current Gain - Bandwidth Product	f_T **	$I_C=500\text{mA}, V_{CE}=10\text{V}$ $f_{test}=1\text{MHz}$	30	-	-	MHz
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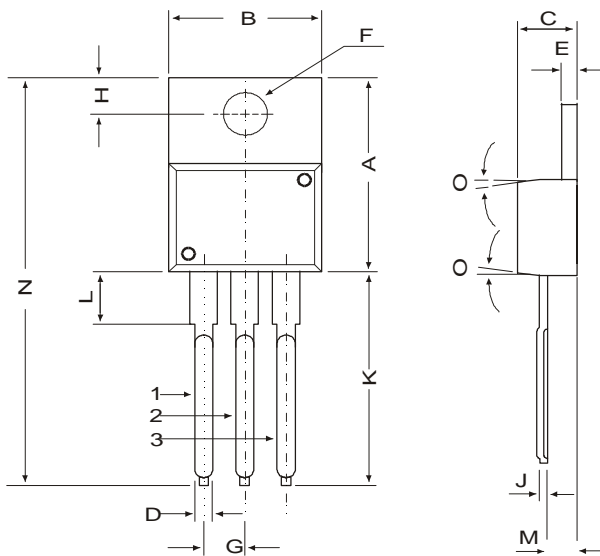
* Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

** $f_T = |h_{fe}| \cdot f_{test}$

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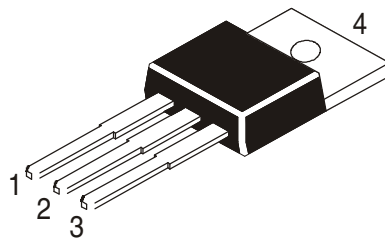
TO - 220
Plastic Package

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	

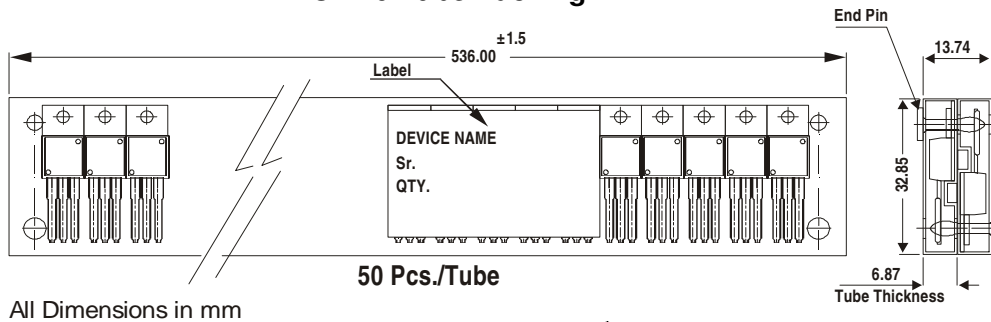
All dimensions in mm.



Pin Configuration

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

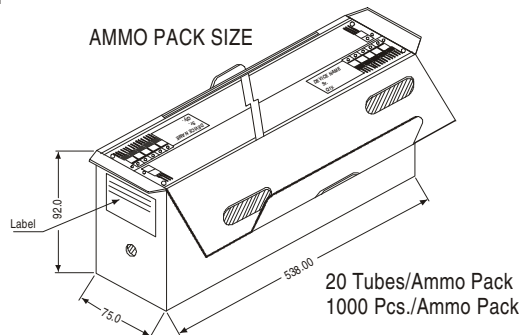
TO-220 Tube Packing



All Dimensions in mm

50 Pcs./Tube

AMMO PACK SIZE



Packing Detail

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

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 is 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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