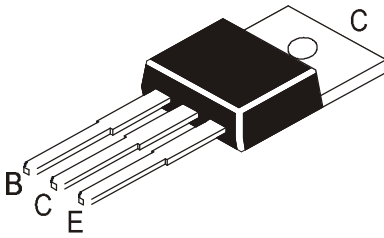


SILICON EPITAXIAL POWER TRANSISTORS

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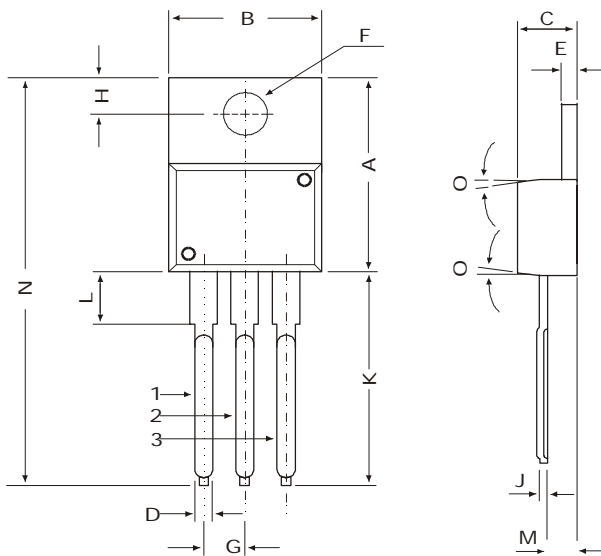
* Pulse Test: Pulse Width $\leq 300\text{ms}$, Duty Cycle $\leq 2\%$

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

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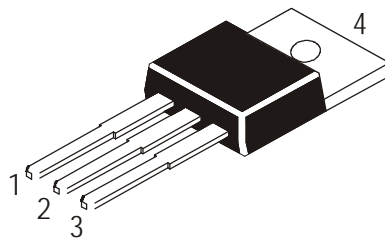
TO - 220
Plastic Package

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	

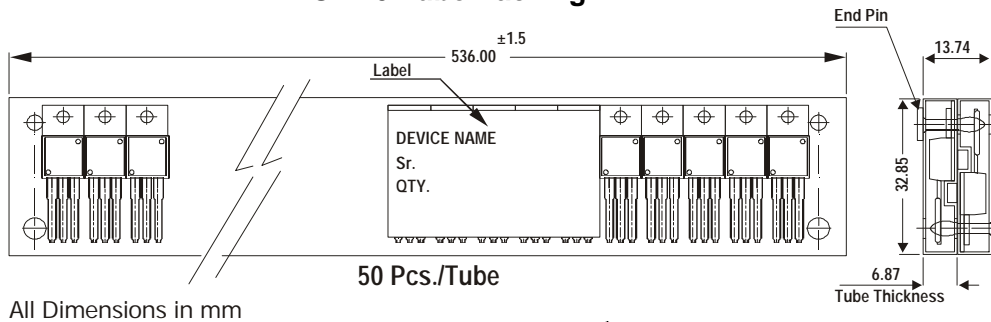
All dimensions in mm.



Pin Configuration

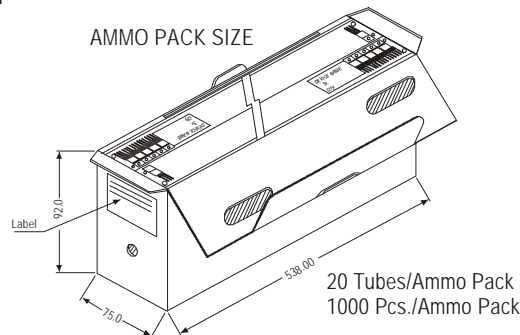
1. Base
2. Collector
3. Emitter
4. Collector

TO-220 Tube Packing



All Dimensions in mm

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

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