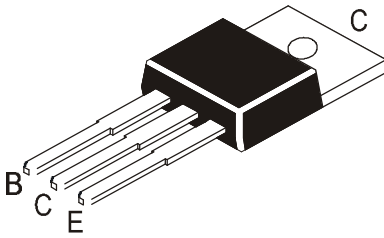


**SILICON EPITAXIAL POWER TRANSISTORS**

**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 $T_C=25^{\circ}C$	$P_D$	50	W
Derate Above $25^{\circ}C$		0.4	W/ $^{\circ}C$
Power Dissipation $T_A=25^{\circ}C$	$P_D$	2	W
Derate Above $25^{\circ}C$		0.016	W/ $^{\circ}C$
Operating & Storage Junction Temperature Range	$T_j, T_{stg}$	- 65 to +150	$^{\circ}C$

**Thermal Resistance**

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

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

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

**Dynamic Characteristics**

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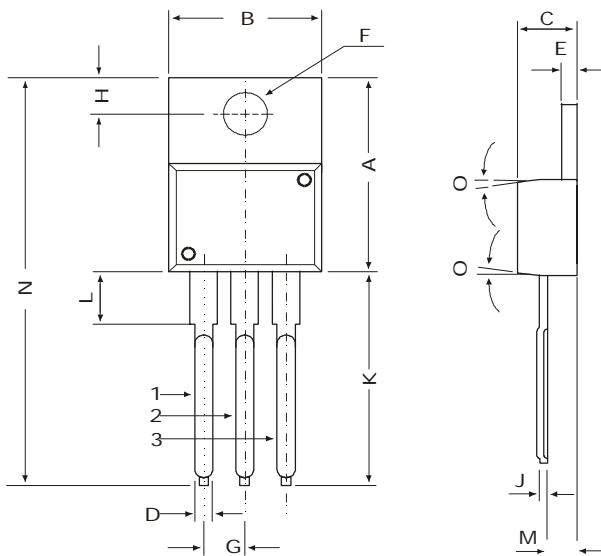
\* Pulse Test: Pulse Width  $\leq 300ms$ , Duty Cycle  $\leq 2\%$

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

**MJE15032 NPN**  
**MJE15033 PNP**

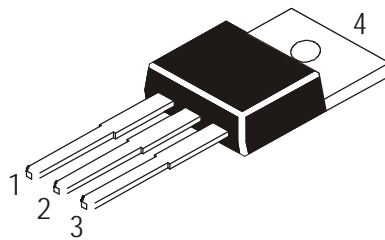
**TO - 220**  
**Plastic Package**

**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	

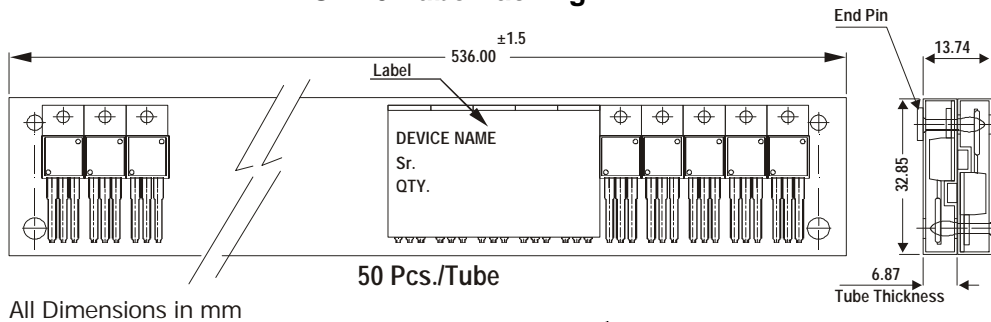
All dimensions in mm.



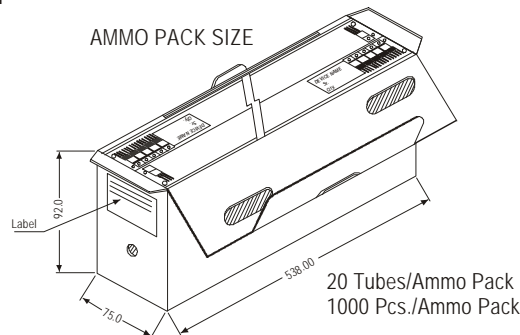
**Pin Configuration**

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

**TO-220 Tube Packing**



**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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