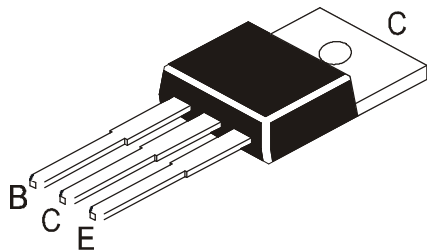


PLASTIC POWER TRANSISTORS

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 | $^\circ\text{C/W}$ |

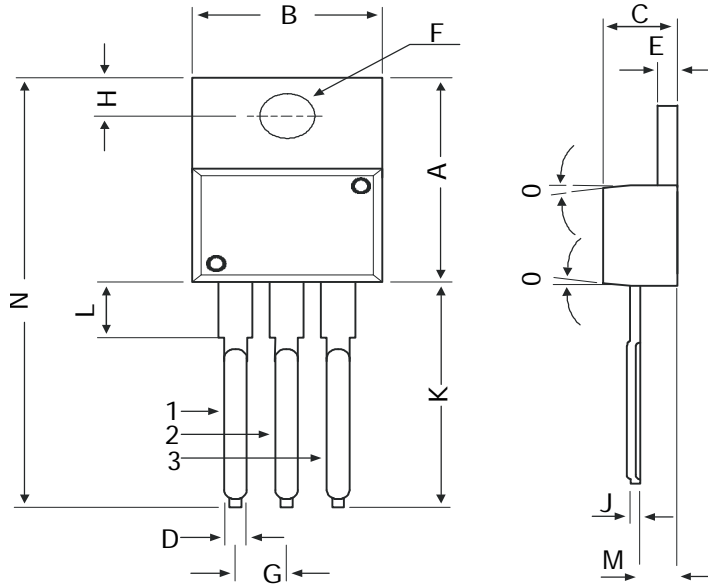
ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless specified otherwise)

| 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 $\leq 2\%$

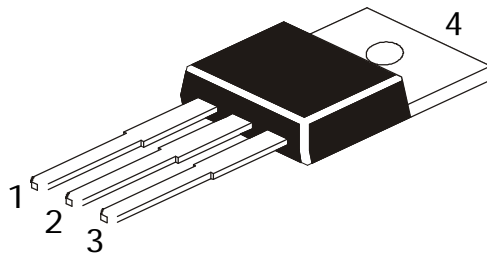
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| DIM | MIN | MAX |
|-----|-------|-------|
| A | 14.42 | 16.51 |
| B | 9.63 | 10.67 |
| C | 3.56 | 4.83 |
| D | — | 0.90 |
| E | 1.15 | 1.40 |
| F | 3.75 | 3.88 |
| G | 2.29 | 2.79 |
| H | 2.54 | 3.43 |
| J | — | 0.56 |
| K | 12.70 | 14.73 |
| L | 2.80 | 4.07 |
| M | 2.03 | 2.92 |
| N | — | 31.24 |
| O | 7 DEG | |

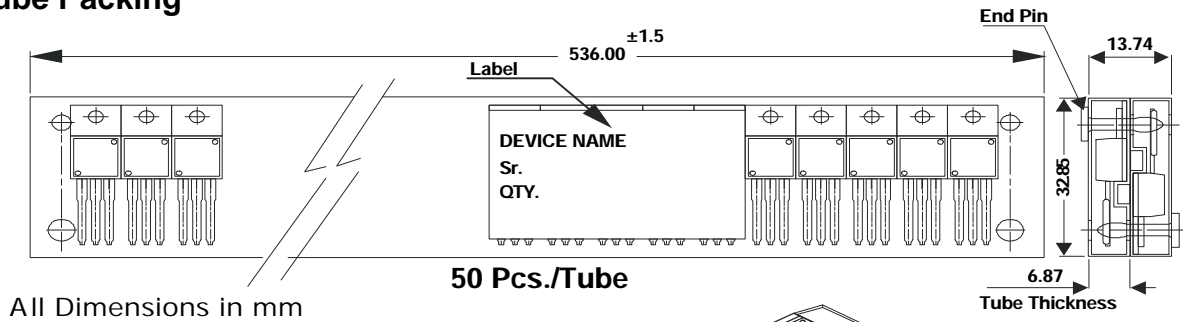
All dimensions in mm.



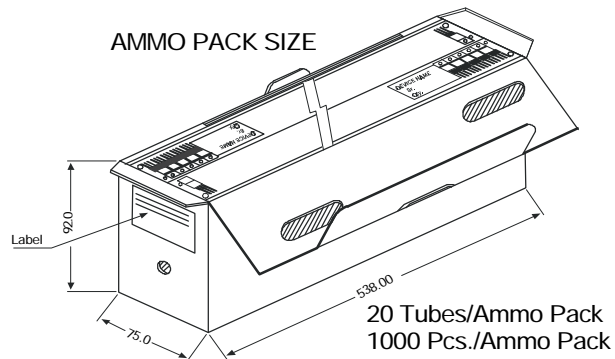
Pin Configuration

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 /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

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