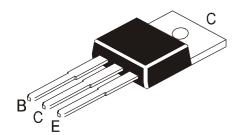


TÜV MANAGEMENT SERVICE

An ISO/TS16949 and ISO 9001 Certified Company

## **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 <sub>C</sub>	10	А
Base Current	I <sub>B</sub>	6.0	А
Power Dissipation upto T <sub>c</sub> =25°C	$P_{D}$	75	W
Derate above 25°C		0.6	W/°C
Power Dissipation upto T <sub>a</sub> =25°C	$P_{D}$	2.0	W
Derate above 25°C		16	mW/°C
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	- 55 to +150	°C

## THERMAL RESISTANCE

Junction to Case	R <sub>th (j-c)</sub>	1.67	°C/W
Junction to Ambient in free air	R <sub>th (j-a)</sub>	62.5	°C/W

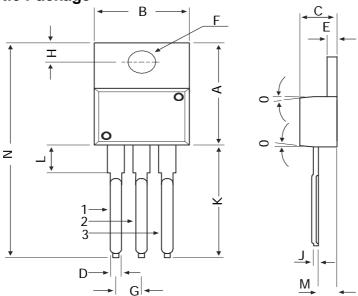
## ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless specified otherwise)

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

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

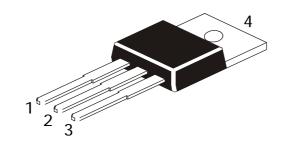
## TO-220 Plastic Package

# **TO-220 Plastic Package**



DIM	MIN	MAX		
Α	14.42	16.51		
В	9.63	10.67		
С	3.56	4.83		
D		0.90		
E	1.15	1.40		
F	3.75	3.88		
G	2.29	2.79		
Н	2.54	3.43		
J	_	0.56		
K	12.70	14.73		
L	2.80	4.07		
М	2.03	2.92		
N	_	31.24		
0	7 DEG			

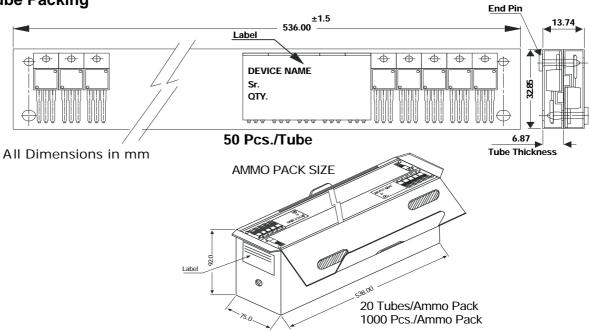
All diminsions in mm.



# Pin Configuration

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

# **TO-220 Tube Packing**



## **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

**Notes** 

MJE2955T PNP MJE3055T NPN

TO-220 Plastic Package

#### **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).

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