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### **MJE2955T**

### **General Purpose and Switching Applications**

- DC Current Gain Specified to I<sub>C</sub> = 10 A
   High Current Gain Bandwidth Product : f<sub>T</sub> = 2MHz (Min.)



1.Base 2.Collector 3.Emitter

### **PNP Silicon Transistor**

### Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	- 70	V
V <sub>CEO</sub>	Collector-Emitter Voltage	- 60	V
V <sub>EBO</sub>	Emitter-Base Voltage	- 5	V
I <sub>C</sub>	Collector Current	- 10	Α
I <sub>B</sub>	Base Current	- 6	Α
P <sub>C</sub>	Collector Dissipation (T <sub>C</sub> =25°C)	75	W
P <sub>C</sub>	Collector Dissipation (T <sub>a</sub> =25°C)	0.6	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 55 ~ 150	°C

### Electrical Characteristics T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV <sub>CEO</sub>	Collector- Emitter Breakdown Voltage	I <sub>C</sub> = - 200mA, I <sub>B</sub> = 0	-60		V
I <sub>CEO</sub>	Collector Cut-off Current	$V_{CE} = -30V, I_{B} = 0$		-700	μΑ
I <sub>CEX1</sub>	Collector Cut-off Current	$V_{CE} = -70V, V_{BE}(off) = 1.5V$		-1	mA
I <sub>CEX2</sub>	Collector Cut-off Current	$V_{CE} = -70V, V_{BE}(off) = 1.5V$ @ $T_{C} = 150^{\circ}C$		-5	mA
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB} = -5V, I_{C} = 0$		-5	mA
h <sub>FE</sub>	* DC Current Gain	V <sub>CE</sub> = - 4V, I <sub>C</sub> = - 4A V <sub>CE</sub> = - 4V, I <sub>C</sub> = - 10A	20 5	100	
V <sub>CE</sub> (sat)	* Collector-Emitter Saturation Voltage	$I_C = -4A$ , $I_B = -0.4A$ $I_C = -10A$ , $I_B = -3.3A$		-1.1 -8	V V
V <sub>BE</sub> (on)	* Base-Emitter ON Voltage	V <sub>CE</sub> = - 4V, I <sub>C</sub> = - 4A		-1.8	V
f <sub>T</sub>	Current Gain Bandwidth Product	V <sub>CE</sub> = - 10V, I <sub>C</sub> = - 500mA	2		MHz

<sup>\*</sup> Pulse test: PW≤300μs, duty cycle≤2% Pulse

# **Typical Characteristic**

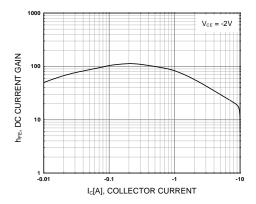


Figure 1. DC current Gain

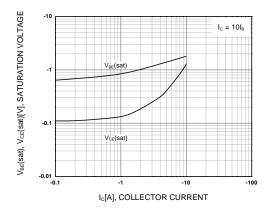


Figure 2. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

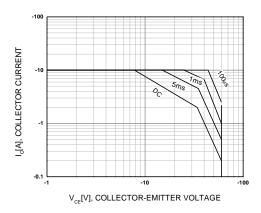


Figure 3. Safe Operating Area

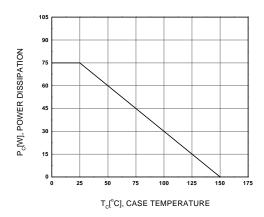
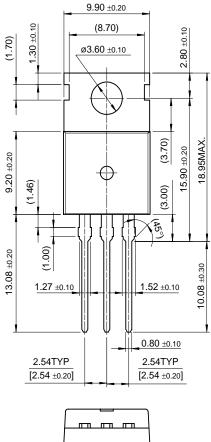
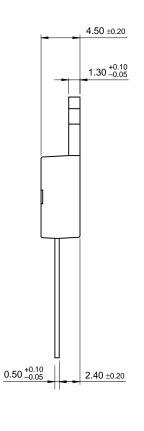


Figure 4. Power Derating

# **Package Demensions**

## TO-220





10.00 ±0.20

Dimensions in Millimeters

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