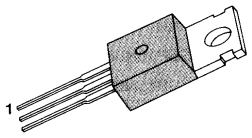
# MJE2955T PNP SILICON TRANSISTOR

**GENERAL PURPOSE AND SWITCHING APPLICATIONS**
**DC CURRENT GAIN SPECIFIED TO 10 AMPERES**

• High Current Gain-Bandwidth Product ($f_T$ = 2kHz (MIN))

TO-220




1. Gate 2. Drain 3. Source

## ABSOLUTE MAXIMUM RATINGS

| Characteristic | Symbol | Rating | Unit |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | -70 | V |
| Collector-Emitter Voltage | $V_{CEO}$ | -60 | V |
| Emitter-Base Voltage | $V_{EBO}$ | -5 | V |
| Collector Current | $I_C$ | -10 | A |
| Base Current | $I_B$ | -6 | A |
| Collector Dissipation ($T_C$=25°C) | $P_C$ | 75 | W |
| Collector Dissipation ($T_A$=25°C) | $P_C$ | 0.6 | W |
| Junction Temperature | $T_J$ | 150 | °C |
| Storage Temperature | $T_{STG}$ | -55 ~ 150 | °C |

## ELECTRICAL CHARACTERISTICS ($T_C$ =25°C)

| Characteristic | Symbol | Test Conditions | Min | Max | Unit |
|---|---|---|---|---|---|
| Collector Emitter Sustaining Voltage | $V_{CEO}$(sus) | $I_C$ = -200mA, $I_B$ = 0 | -60 | | V |
| Collector Cutoff Current | $I_{CEO}$ | $V_{CE}$ = -30V, $I_B$ = 0 | | -700 | μA |
| Collector Cutoff Current | $I_{CEX}$ | $V_{CE}$ = -70V, $V_{BE}$(off) = 1.5V | | -1 | mA |
| | | $V_{CE}$ = -70V, $V_{BE}$(off) =1.5V<br>$T_C$ = 150°C | | -5 | |
| Emitter Cutoff Current | $I_{EBO}$ | $V_{EB}$ = -5V, $I_C$ = 0 | | -5 | mA |
| * DC Current Gain | $h_{FE}$ | $V_{CE}$ = -4V, $I_C$ = -4A | 20 | 100 | |
| | | $V_{CE}$ = -4V, $I_C$ = -10A | 5 | | |
| * Collector-Emitter Saturation Voltage | $V_{CE}$(sat) | $I_C$ = -4A, $I_B$ = -0.4A | | -1.1 | V |
| | | $I_C$ = -10A, $I_B$ = -3.3A | | -8 | V |
| * Base Emitter On Voltage | $V_{BE}$ (on) | $V_{CE}$ = -4V, $I_C$ = -4A | | -1.8 | V |
| Current Gain Bandwidth Product | $f_T$ | $V_{CE}$ = -10V, $I_C$ = -500mA<br>f = 500kHz | 2 | | MHz |

* Pulse test: PW≤300μs, duty cycle≤2% Pulse



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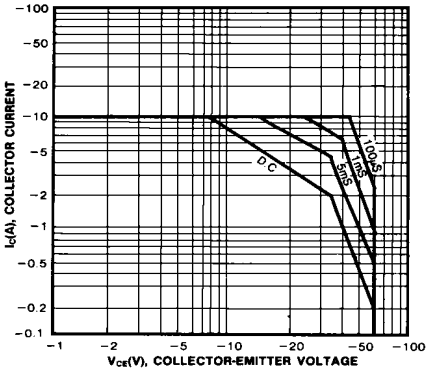
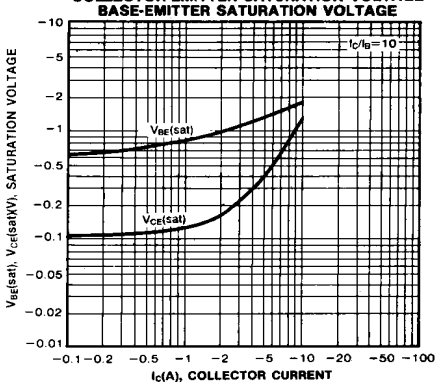
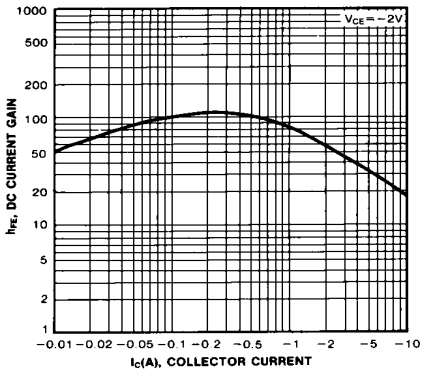
**SAFE OPERATING AREA**



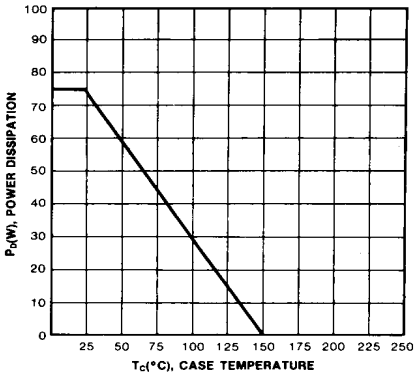

**COLLECTOR-EMITTER SATURATION VOLTAGE**
**BASE-EMITTER SATURATION VOLTAGE**




**DC CURRENT GAIN**




**POWER DERATING**



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|---|---|---|
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