



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220 Plastic-Encapsulate Transistors

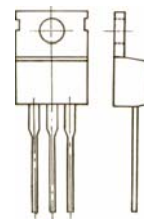
MJE2955 TRANSISTOR (PNP)

FEATURES

GENERAL PURPOSE AND SWITCHING APPLICATIONS.

TO-220

1. BASE
2. COLLECTOR
3. EMITTER



1 2 3

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-70	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-10	A
P_C	Collector Power Dissipation	2	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55-150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\text{mA}$, $I_E=0$	-70			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-200\text{mA}$, $I_B=0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\text{mA}$, $I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-70\text{V}$, $I_E=0$			-1	mA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-5	mA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=-4\text{V}$, $I_C=-4\text{A}$	20		100	
	$h_{FE(2)}^*$	$V_{CE}=-4\text{V}$, $I_C=-10\text{A}$	5			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-4\text{A}$, $I_B=-0.4\text{A}$			-1.1	V
	$V_{CE(sat)}^*$	$I_C=-10\text{A}$, $I_B=-3.3\text{A}$			-8	V
Base-emitter voltage	V_{BE}^*	$V_{CE}=-4\text{V}$, $I_C=-4\text{A}$			-1.8	V
Transition frequency	f_T	$V_{CE}=-10\text{V}$, $I_C=-0.5\text{A}$	2			MHz

Note:*Pulse test: $t_p \leq 300\mu\text{s}$, $\delta \leq 0.02$.

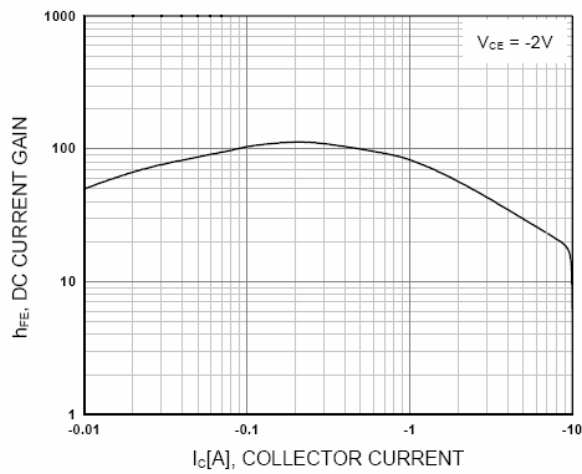
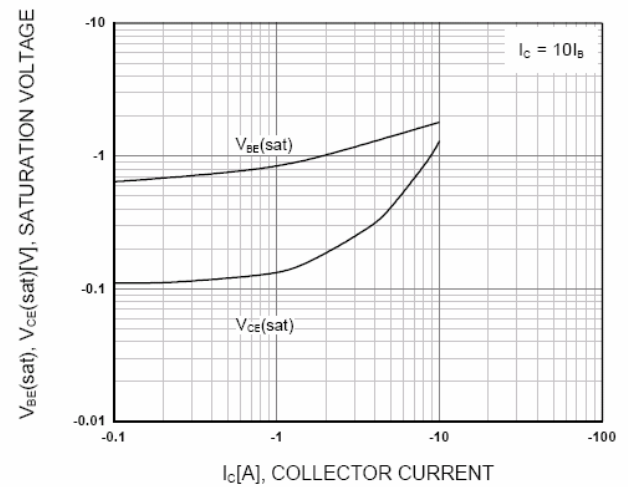


Figure 1. DC current Gain



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

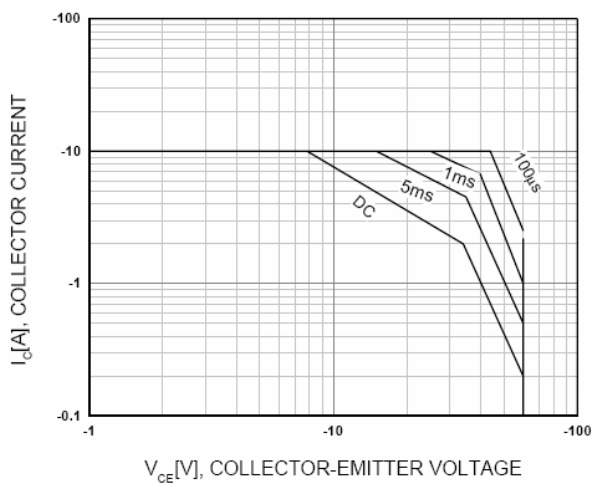


Figure 3. Safe Operating Area

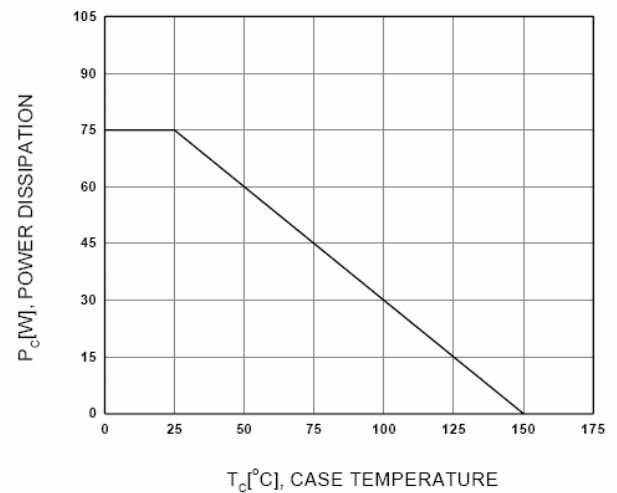


Figure 4. Power Derating