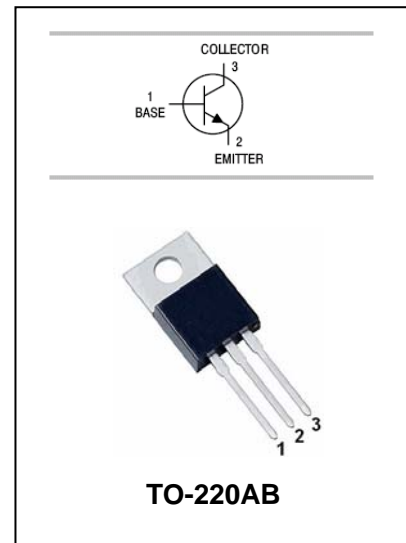


Plastic-Encapsulate Transistors

MJE3055

FEATURES

- DC Current Gain Specified to 10A.
- High Current Gain.



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	10	A
I_B	Base Current	6	A
P_C	Collector Dissipation @ $T_C=25^{\circ}C$	75	W
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	$^{\circ}C$

Plastic-Encapsulate Transistors

MJE3055

ELECTRICAL CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C=200mA, I_B=0$	60		V
Collector Cut-off Current	I_{CEO}	$V_{CE}=30V, I_B=0$		700	μA
Collector Cut-off Current	I_{CEX}	$V_{CE}=70V, V_{EB(off)}=1.5V$ $V_{CE}=70V, V_{EB(off)}=1.5V, T_C=150^\circ C$		1.0 5.0	mA
Collector Cut-off Current	I_{CBO}	$V_{CB}=70V, I_E=0$ $V_{CB}=70V, I_E=0, T_C=150^\circ C$		1 10	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$		5	mA
DC Current Gain	h_{FE}	$V_{CE}=4V, I_C=4A$ $V_{CE}=4V, I_C=10A$	20 5.0	100	
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=0.4A$ $I_C=10A, I_B=3.3A$		1.1 8.0	V
Base-emitter on Voltage	$V_{BE(on)}$	$V_{CE}=4V, I_C=4A$		1.8	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=0.5A, f=500kHz$	2		MHz

TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

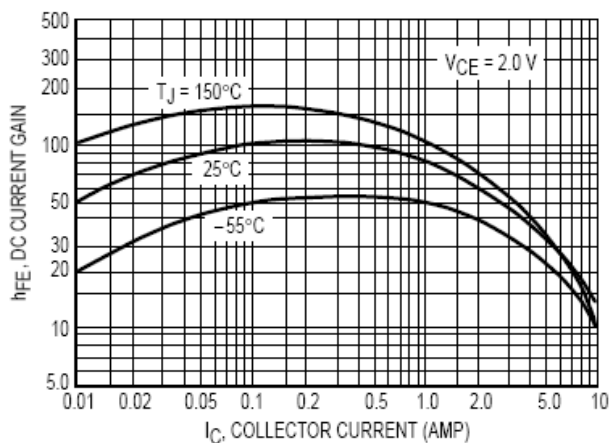


Figure 2. DC Current Gain

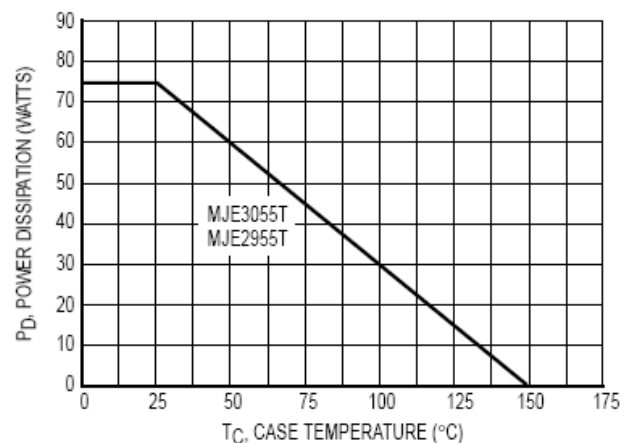


Figure 3. Power Derating

Plastic-Encapsulate Transistors

MJE3055

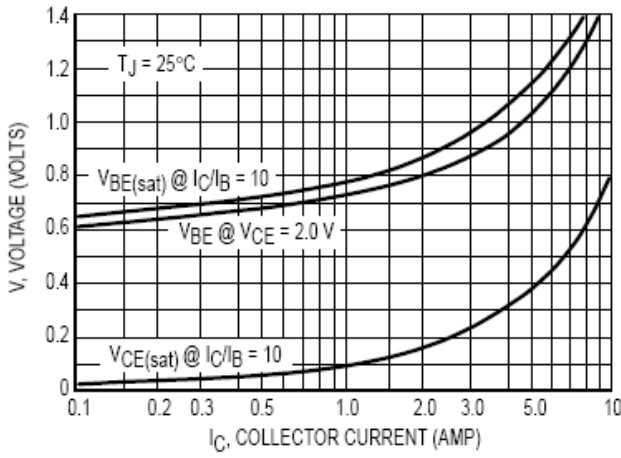


Figure 4. "On" Voltages

PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

