



Complementary Silicon Power Transistors

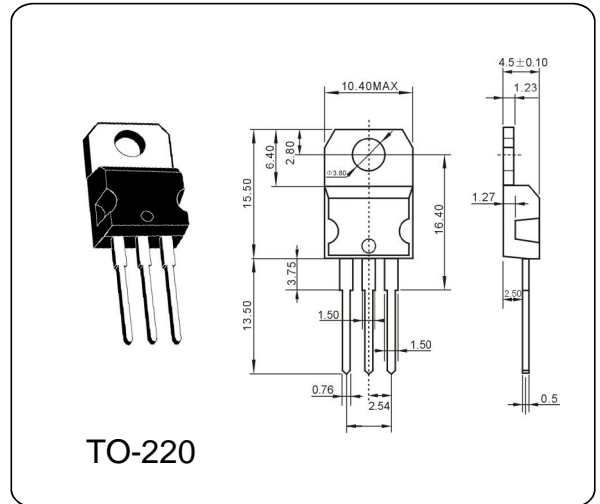
MJE3055T / MJE2955T

DESCRIPTION

It is intended for use in power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	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
Total Dissipation at	P_{tot}	75	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CEO}	$V_{CB}=60V, I_E=0$			0.3	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$			5.0	mA
Collector-Emitter Sustaining Voltage	V_{CEO}	$I_C=100mA, I_B=0$	60			V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4V, I_C=4.0A$	20		100	
	$h_{FE(2)}$	$V_{CE}=4V, I_C=10.0A$	5			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.0A, I_B=400mA$			1.1	V
		$I_C=10.0A, I_B=3.3A$			8.0	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$V_{CE}=4V, I_C=4.0A$			1.8	V
Current Gain Bandwidth Product	f_T	$V_{CE}=10V, I_C=500mA$	2			MHz