

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

MJE2955T PNP  
MJE3055T NPN

COMPLEMENTARY SILICON  
PLASTIC POWER TRANSISTORS

JEDEC TO-220AB CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR MJE2955T, MJE3055T are complementary Silicon Plastic Power Transistors designed for high current amplifier and switching applications.

## MAXIMUM RATINGS (T<sub>C</sub>=25°C)

	SYMBOL		UNIT
Collector-Base Voltage	V <sub>CB0</sub>	70	V
Collector-Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter-Base Voltage	V <sub>EB0</sub>	5.0	V
Collector Current	I <sub>C</sub>	10	A
Base Current	I <sub>B</sub>	6.0	A
Power Dissipation	P <sub>D</sub>	75	W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 TO +150	°C
Thermal Resistance	θ <sub>JC</sub>	1.67	°C/W

## ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>CB0</sub>	V <sub>CB</sub> =70V		1.0	mA
I <sub>CB0</sub>	V <sub>CB</sub> =70V, T <sub>C</sub> =150°C		10	mA
I <sub>CEV</sub>	V <sub>CE</sub> =70V, V <sub>EB</sub> (OFF)=1.5V		1.0	mA
I <sub>CEV</sub>	V <sub>CE</sub> =70V, V <sub>EB</sub> (OFF)=1.5V, T <sub>C</sub> =150°C		5.0	mA
I <sub>CEO</sub>	V <sub>CE</sub> =30V		700	μA
I <sub>EBO</sub>	V <sub>BE</sub> =5.0V		5.0	mA
h <sub>FE</sub>	V <sub>CE</sub> =4.0V, I <sub>C</sub> =4.0A	20	100	
h <sub>FE</sub>	V <sub>CE</sub> =4.0V, I <sub>C</sub> =10A	5.0		
V <sub>CE</sub> (SAT)	I <sub>C</sub> =4.0A, I <sub>B</sub> =0.4A		1.1	V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =10A, I <sub>B</sub> =3.3A		8.0	V
V <sub>BE</sub> (ON)	V <sub>CE</sub> =4.0V, I <sub>C</sub> =4.0A		1.8	V
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA, f=500kHz	2.0		MHz