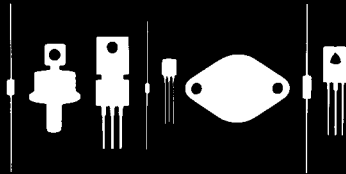


Central  
Semiconductor Corp.  
Central  
Semiconductor Corp.  
Central  
Semiconductor Corp.  
Central™  
Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, New York 11788



MJE341  
MJE344  
NPN SILICON  
POWER TRANSISTOR  
JEDEC TO-126 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR MJE341, MJE344 types are NPN Silicon Power Transistors designed for amplifier applications requiring high  $f_T$ .

## MAXIMUM RATINGS ( $T_C = 25^\circ\text{C}$ )

	SYMBOL	MJE341	MJE344	UNITS
Collector-Base Voltage	$V_{CBO}$	175	200	V
Collector-Emitter Voltage	$V_{CEO}$	150	200	V
Emitter-Base Voltage	$V_{EBO}$	3.0	5.0	V
Continuous Collector Current	$I_C$	500		mA
Continuous Base Current	$I_B$	250		mA
Power Dissipation	$P_D$	20		W
Operating and Storage				
Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$	6.25		$^\circ\text{C/W}$

## ELECTRICAL CHARACTERISTICS ( $T_C = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MJE341		MJE344		UNITS
		MIN	MAX	MIN	MAX	
$I_{CBO}$	$V_{CB} = \text{Rated } V_{CBO}$		0.3		0.1	mA
$I_{CEO}$	$V_{CE} = \text{Rated } V_{CEO}$		1.0		1.0	mA
$I_{EBO}$	$V_{EB} = \text{Rated } V_{EBO}$		0.1		0.1	mA
$BV_{CEO}$	$I_C = 1.0\text{mA}$	150		200		V
$V_{CE(SAT)}$	$I_C = 50\text{mA}, I_B = 5.0\text{mA}$		-		1.0	V
$V_{CE(SAT)}$	$I_C = 150\text{mA}, I_B = 15\text{mA}$		2.3		-	V
$V_{BE(ON)}$	$V_{CE} = 10\text{V}, I_C = 50\text{mA}$		1.0		1.0	V
$h_{FE}$	$V_{CE} = 10\text{V}, I_C = 10\text{mA}$	20		-		
$h_{FE}$	$V_{CE} = 10\text{V}, I_C = 50\text{mA}$	25	200	30	300	
$h_{FE}$	$V_{CE} = 10\text{V}, I_C = 150\text{mA}$	20		-		
$f_T$	$V_{CE} = 25\text{V}, I_C = 50\text{mA}, f = 10\text{MHz}$	15		15		MHz
$C_{ob}$	$V_{CB} = 20\text{V}, I_E = 0, f = 100\text{kHz}$		15		15	pF
$h_{fe}$	$V_{CE} = 10\text{V}, I_C = 50\text{mA}, f = 1.0\text{kHz}$	25		25		