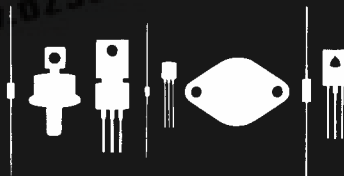


Central Semiconductor Corp.
 Central Semiconductor Corp.
 Central Semiconductor Corp.
CentralTM Semiconductor Corp.
 145 Adams Avenue
 Hauppauge, New York 11788



MJE710 MJE711 MJE712 PNP
 MJE720 MJE721 MJE722 NPN
 COMPLEMENTARY SILICON
 PLASTIC POWER TRANSISTORS
 JEDEC TO-126 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MJE710, MJE720 series types are Complementary Silicon Power Transistors designed for low power amplifier and medium speed switching applications.

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

	SYMBOL	MJE710 MJE720	MJE711 MJE721	MJE712 MJE722	UNIT
Collector-Base Voltage	V_{CB0}	40	60	80	V
Collector-Emitter Voltage	V_{CE0}	40	60	80	V
Emitter-Base Voltage	V_{EB0}	40	60	80	V
Collect Current	I_C		1.5		A
Base Current	I_B		0.5		A
Power Dissipation($T_A=25^\circ\text{C}$)	P_D		1.5		W
Power Dissipation	P_D		25		W
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +150			$^\circ\text{C}$
Thermal Resistance	θ_{JA}		83.3		$^\circ\text{C/W}$
Thermal Resistance	θ_{JC}		5.0		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CEV}	$V_{CE}=\text{Rated } V_{CE0}, V_{BE}(\text{OFF})=1.5\text{V}$		100	μA
I_{CEV}	$V_{CE}=\text{Rated } V_{CE0}, V_{BE}(\text{OFF})=1.5\text{V}, T_C=125^\circ\text{C}$		500	μA
I_{CEO}	$V_{CE}=\frac{1}{2}\text{Rated } V_{CE0}$		500	μA
I_{EBO}	$V_{BE}=5.0\text{V}$		1.0	mA
BV_{CE0}	$I_C=50\text{mA (MJE710, MJE720)}$	40		V
BV_{CE0}	$I_C=50\text{mA (MJE711, MJE721)}$	60		V
BV_{CE0}	$I_C=50\text{mA (MJE712, MJE722)}$	80		V
$V_{CE}(\text{SAT})$	$I_C=150\text{mA}, I_B=15\text{mA}$		0.15	V
$V_{CE}(\text{SAT})$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.4	V
$V_{CE}(\text{SAT})$	$I_C=1.5\text{A}, I_B=300\text{mA}$		1.0	V
$V_{BE}(\text{SAT})$	$I_C=1.5\text{A}, I_B=300\text{mA}$		1.3	V
$V_{BE}(\text{ON})$	$V_{CE}=1.0\text{V}, I_C=500\text{mA}$		0.95	V
h_{FE}	$V_{CE}=1.0\text{V}, I_C=150\text{mA}$	40		
h_{FE}	$V_{CE}=1.0\text{V}, I_C=500\text{mA}$	20		
h_{FE}	$V_{CE}=1.0\text{V}, k=1.0\text{A}$	8.0		

