

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N6211
2N6212
2N6213

PNP SILICON
POWER TRANSISTOR

JEDEC TO-66 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6211 series types are PNP Silicon Power Transistors designed for high speed switching and high voltage amplifier applications.

MAXIMUM RATINGS (T_C = 25°C)

	SYMBOL	2N6211	2N6212	2N6213	UNITS
Collector-Base Voltage	V _{CBO}	275	350	400	V
Collector-Emitter Voltage	V _{CEO}	225	300	350	V
Emitter-Base Voltage	V _{EBO}	6.0	6.0	6.0	V
Collector Current	I _C	2.0	2.0	2.0	A
Peak Collector Current	I _{CM}	5.0	5.0	5.0	A
Base Current	I _B	1.0	1.0	1.0	A
Power Dissipation	P _D	35	35	35	W
Operating and Storage Junction Temperature	T _J , T _{stg}		-65 to +200		°C
Thermal Resistance	θ _{JC}	5.0	5.0	5.0	°C/W

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6211		2N6212		2N6213		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{CEV}	V _{CE} = 250V, V _{BE(off)} = 1.5V		0.5					mA
I _{CEV}	V _{CE} = 315V, V _{BE(off)} = 1.5V				0.5			mA
I _{CEV}	V _{CE} = 360V, V _{BE(off)} = 1.5V						0.5	mA
I _{CEV}	V _{CE} = 250V, V _{BE(off)} = 1.5V, T _C = 100°C		5.0					mA
I _{CEV}	V _{CE} = 315V, V _{BE(off)} = 1.5V, T _C = 100°C				5.0			mA
I _{CEV}	V _{CE} = 360V, V _{BE(off)} = 1.5V, T _C = 100°C						5.0	mA
I _{CEO}	V _{CE} = 150V		5.0		5.0		5.0	mA
I _{EBO}	V _{EB} = 6.0V		1.0		0.5		0.5	mA
BV _{CEV}	I _C = 50mA, V _{BE} = 1.5V, L = 10mH	275		350		400		V
BV _{CER}	I _C = 50mA, R _{BE} = 50Ω	250		325		375		V
BV _{CEO}	I _C = 50mA	225		300		350		V
BV _{EBO}	I _E = 1.0mA	6.0						V
BV _{EBO}	I _E = 0.5mA			6.0		6.0		V
V _{CE(SAT)}	I _C = 1.0A, I _B = 125mA		1.4		1.6		2.0	V
V _{BE(SAT)}	I _C = 1.0A, I _B = 125mA		1.4		1.4		1.4	V
h _{FE}	V _{CE} = 2.8V, I _C = 1.0A	10	100					
h _{FE}	V _{CE} = 3.2V, I _C = 1.0A			10	100			
h _{FE}	V _{CE} = 4.0V, I _C = 1.0A					10	100	

(CONTINUED ON REVERSE SIDE)

ELECTRICAL CHARACTERISTICS (CONTINUED)

SYMBOL	TEST CONDITIONS	2N6211		2N6212		2N6213		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
f_T	$V_{CE}=10V, I_C=200mA, f=5.0MHz$	20		20		20		MHz
C_{ob}	$V_{CB}=10V, I_E=0, f=1.0MHz$		220		220		220	pF
t_r	$V_{CC}=200V, I_C=1.0A, I_{B1}=I_{B2}=125mA$		0.6		0.6		0.6	μs
t_s	$V_{CC}=200V, I_C=1.0A, I_{B1}=I_{B2}=125mA$		2.5		2.5		2.5	μs
t_f	$V_{CC}=200V, I_C=1.0A, I_{B1}=I_{B2}=125mA$		0.6		0.6		0.6	μs
$I_{S/b}$	$V_{CE}=40V, t=1.0s$	875		875		875		mA

TO-66 CASE - MECHANICAL OUTLINE

All Dimensions in Inches (mm).

