

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

2N5771
PN5910

2N5910

JEDEC TO-92

JEDEC TO-106

PNP SILICON SWITCHING TRANSISTORS

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5771, 2N/PN5910 Series types are Silicon PNP Transistors designed for ultra high speed switching applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	2N5771	2N/PN5910	UNIT
Collector-Base Voltage	V _{CB0}	15	-	V
Collector-Emitter Voltage	V _{CES}	-	20	V
Collector-Emitter Voltage	V _{CEO}	15	20	V
Emitter-Base Voltage	V _{EBO}	4.5	4.5	V
Collector Current	I _C	50	50	mA
Power Dissipation	P _D	625	310	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 TO +150		°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	2N5771		2N/PN5910		UNIT
		MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =8.0V		10	-		nA
I _{CES}	V _{CE} =8.0V		10	-		nA
I _{CES}	V _{CE} =10V		-	10		nA
I _{EBO}	V _{EB} =4.5V		1.0	-		μA
I _{EBO}	V _{EB} =4.0V		-	100		μA
I _B	V _{CE} =6.0V, V _{EB} =0		-	10		nA
BV _{CB0}	I _C =100μA	15		20		V
BV _{CES}	I _C =100μA	15		20		V
BV _{CEO}	I _C =3.0mA	15		20		V
BV _{EBO}	I _E =100μA	4.5		4.5		V
V _{CE(SAT)}	I _C =1.0mA, I _B =0.1mA		0.15	-		V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.18	0.15		V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA		0.6	0.5		V
V _{BE(SAT)}	I _C =1.0mA, I _B =0.1mA		0.8	-		V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA	0.8	0.95	0.75	0.95	V
V _{BE(SAT)}	I _C =50mA, I _B =5.0mA		1.5	1.5		V
h _{FE}	V _{CE} =0.5V, I _C =1.0mA	35		15		-
h _{FE}	V _{CE} =0.3V, I _C =10mA	50	120	30	120	-
h _{FE}	V _{CE} =1.0V, I _C =50mA	40		30		-
f _T	V _{CE} =10V, I _C =10mA, f=100MHz	850		700		MHz
C _{cb}	V _{CB} =5.0V, f=140kHz		3.0		3.0	pF
C _{eb}	V _{EB} =0.5V, f=140kHz		3.5		3.5	pF
t _{on}	I _C =10mA, I _{B1} =1.0mA		15		15	ns
t _{off}	I _C =10mA, I _{B1} =I _{B2} =1.0mA		20		20	ns
t _{fall}	I _C =10mA, I _{B1} =I _{B2} =10mA		20		20	ns

