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2N5771
PN5910

2N5910

JEDEC TO-92 JEDEC TO-106

PNP SILICON SWITCHING TRANSISTORS

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	2N5771	2N/PN5910	UNIT
Collector-Base Voltage	V_{CBO}	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
		2N5771/PN5910	2N5910	
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 MIN	2N5771 MAX	2N/PN5910 MIN	2N/PN5910 MAX	UNIT
I_{CBO}	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_{CBO}	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
τ_s	I_C=10mA, I_{B1}=I_{B2}=10mA		20		20	ns

ELECTRICAL CHARACTERISTICS ($T_A = 25^oC$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	PN4354 MIN	PN4354 MAX	PN4355 MIN	PN4355 MAX	PN4356 MIN	PN4356 MAX	UNITS
h_{FE}	$V_{CE} = 10V$, $I_C = 100\mu A$	25		60		25		
h_{FE}	$V_{CE} = 10V$, $I_C = 1.0mA$	40		75		40		
h_{FE}	$V_{CE} = 10V$, $I_C = 10mA$	50	500	100	400	50	250	
h_{FE}	$V_{CE} = 10V$, $I_C = 100mA$	40		75		40		
h_{FE}	$V_{CE} = 10V$, $I_C = 500mA$	30		75		30		
f_T	$V_{CE} = 10V$, $I_C = 50mA$, $f = 100MHz$	100	500	100	500	100	500	MHz
C_{ob}	$V_{CB} = 10V$, $I_E = 0$, $f = 1.0MHz$		30		30		30	pF
C_{ib}	$V_{CB} = 0.5V$, $I_C = 0$, $f = 1.0MHz$		110		110		110	pF
t_{on}	$V_{CC} = 30V$, $I_C = 500mA$, $I_{B1} = 50mA$		100		100		100	ns
t_{off}	$V_{CC} = 30V$, $I_C = 500mA$, $I_{B1} = I_{B2} = 50mA$		400		400		400	ns
NF	$V_{CE} = 10V$, $I_C = 100\mu A$, $R_S = 1.0k\Omega$, $f = 1.0kHz$, $BW = 1.0Hz$		3.0		3.0		3.0	dB