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2N3707
2N3708
2N3709
2N3710
2N3711



SILICON NPN TRANSISTOR

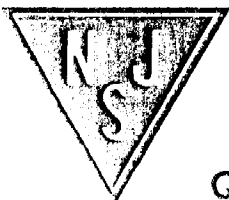
JEDEC TO-92 CASE

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

	SYMBOL		UNIT
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CE0}	30	V
Emitter-Base Voltage	V_{EB0}	6.0	V
Collector Current	I_C	200	mA
Power Dissipation	P_D	625	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 TO +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$)

SYMBOL	TEST CONDITIONS	2N3707		2N3708		2N3709		2N3710		2N3711		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB}=20\text{V}$		100		100		100		100		100	nA
I_{EBO}	$V_{EB}=6.0\text{V}$		100		100		100		100		100	nA
BV_{CEO}	$I_C=1.0\text{mA}$	30		30		30		30		30		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=0.5\text{mA}$		1.0		1.0		1.0		1.0		1.0	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=100\mu\text{A}$	100	400									
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$			45	660	45	165	90	330	180	660	
h_{fe}	$V_{CE}=5.0\text{V}, I_C=100\mu\text{A}$ $f=1\text{kHz}$	100	550									
h_{fe}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$ $f=1\text{kHz}$			45	800	45	250	90	450	180	800	
NF	$V_{CE}=5.0\text{V}, I_C=100\mu\text{A}$, $R_G=10\text{K}\Omega, BW=15.7\text{kHz}$ (2N3707 only)		5.0		-		-		-		-	dB



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors