

# New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.  
 SPRINGFIELD, NEW JERSEY 07081  
 U.S.A.

TELEPHONE: (973) 376-2922  
 (212) 227-6005  
 FAX: (973) 376-8960

2N6548  
 2N6549

## NPN SILICON DARLINGTON TRANSISTORS

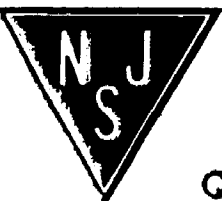
TO-202 CASE

### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	V <sub>CB0</sub>	50	V
Collector-Emitter Voltage	V <sub>CES</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	40	V
Emitter-Base Voltage	V <sub>EBO</sub>	12	V
Collector Current	I <sub>C</sub>	2.0	A
Base Current	I <sub>B</sub>	100	mA
Power Dissipation	P <sub>D</sub>	2.0	W
Power Dissipation (T <sub>C</sub> =25°C)	P <sub>D</sub>	10	W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 TO +150	°C
Thermal Resistance	θ <sub>JA</sub>	62.5	°C/W
Thermal Resistance	θ <sub>JC</sub>	12.5	°C/W

### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6548		2N6549		UNIT
		MIN	MAX	MIN	MAX	
I <sub>CBO</sub>	V <sub>CB</sub> =30V		100		100	nA
I <sub>EBO</sub>	V <sub>EB</sub> =10V		100		100	nA
V <sub>CB0</sub>	I <sub>C</sub> =100μA	50		50		V
V <sub>CES</sub>	I <sub>C</sub> =100μA	40		40		V
V <sub>EBO</sub>	I <sub>E</sub> =10μA	12		12		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =2.0mA		1.5		1.5	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =2.0A, I <sub>B</sub> =4.0mA		2.0		2.0	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =2.0mA		2.0		2.0	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0A		2.0		2.0	V
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =200mA	25,000	150,000	15,000	150,000	
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =500mA	15,000		10,000		
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0A	5,000		3,000		
h <sub>fe</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =50mA, f=1.0kHz	20,000		15,000		
f <sub>T</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =200mA, f=100MHz	100		100		MHz
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		7.0		7.0	pF



NJ Semi-Conductors reserves the right to change test conditions, parameters 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**