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

2N5189

NPN SILICON POWER TRANSISTOR

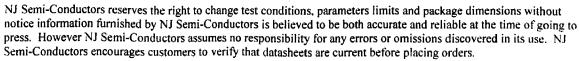
JEDEC TO-39 CASE

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

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CEO}	35	v
Emitter-Base Voltage	V _{EBO}	5.0	v
Power Dissipation	PD	5.0	w
Operating and Storage	J		VV
Junction Temperature	T_J, T_stg	-65 to +200	°C
Thermal Resistance	θJC	35	oc/w

<u>ELECTRICAL CHARACTERISTICS</u> (T_C = 25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	<u>UNITS</u>
^I CBO	V _{CB} =30V		0.5	μΑ
^{B∨} CBO	$I_C = 100\mu A$	60		V
BVCEO	$I_C = 10 \text{mA}$	35		V
BVCEO	I _E = 100μA	5.0		V
VCE(SAT)	$I_C = 1.0A$, $I_B = 100mA$		1.0	V
V _{BE(SAT)}	$I_C = 1.0A$, $I_B = 100mA$		1.5	V
hFE	$V_{CE} = 1.0V$, $I_{C} = 100mA$	30		•
hFE	$V_{CE} = 1.0V$, $I_{C} = 500mA$	35		
hFE	$V_{CE} = 1.0V, J_{C} = 1.0A$	15		
f _T	$V_{CE} = 10V$, $I_{C} = 50mA$, $f = 100MHz$	250		MHz
^t on	$V_{CC} = 10.7V$, $I_{C} = 1.0A$, $I_{B1} = 100mA$		40	ns
^t off	$V_{CC} = 10.7V$, $I_{C} = 1.0A$, $I_{B1} = I_{B2} = 100mA$		70	ns
C _{ob}	$V_{CB} = 10V$, $I_E = 0$, $f = 1.0MHz$		12	pF



Quality Semi-Conductors