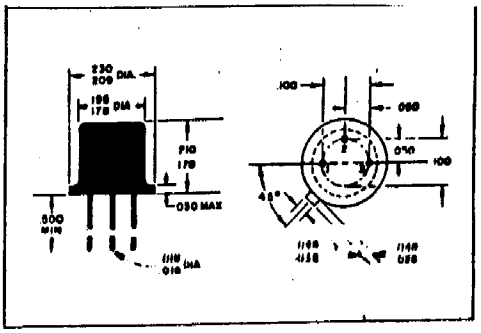
New Jersey Semi-Conductor Products, Inc.

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

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

2N2483
NPN SILICON TRANSISTOR



MECHANICAL DATA

CASE: JEDEC TO-18

TERMINAL CONNECTIONS:
Lead 1 Emitter
Lead 2 Base
Lead 3 Collector (Electrically connected to case)

ELECTRICAL DATA

ABSOLUTE MAXIMUM RATINGS:

Collector to Base Voltage V_{CBO}	60 volts
Collector to Emitter Voltage V_{CEO}	60 volts
Emitter to Base Voltage V_{EBO}	6.0 volts
Total Device Dissipation	
@ Case Temperature 25° C	1.2 watts
@ Case Temperature 100° C	0.68 watts
@ Free Air Temperature 25° C	0.36 watts
Junction Temperature (Operating)	-65° C to +200° C
Storage Temperature	-65° C to +300° C

ELECTRICAL CHARACTERISTICS: @25° C (unless otherwise noted)

	SYM.	CONDITIONS	MIN.	MAX.	UNITS
Collector to Base Breakdown Voltage	BV_{CBO}	I_C=10 μA	60	....	volts
Collector to Emitter Breakdown Voltage	BV_{CEO}	I_C=10 mA ▲	60	....	volts
Emitter to Base Breakdown Voltage	BV_{EBO}	I_E=10 μA	6.0	....	volts
Collector Cutoff Current	I_{CBO1}	V_{CB}=45 V	....	10	nA
	I_{CBO2}	V_{CB}=45 V, TA=150° C	....	10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5.0 V	....	10	nA
DC Current Gain	h_{FE1}	V_{CE}=5.0 V, I_C=1.0 μA	....	....	....
	h_{FE2}	V_{CE}=5.0 V, I_C=10 μA	40	120	....
	h_{FE3}	V_{CE}=5.0 V, I_C=10 μA, TA=-55° C	10	....	....
	h_{FE4}	V_{CE}=5.0 V, I_C=100 μA	75	....	....
	h_{FE5}	V_{CE}=5.0 V, I_C=500 μA	100	....	....
	h_{FE6}	V_{CE}=5.0 V, I_C=1.0 mA	175	....	....
	h_{FE7}	V_{CE}=5.0 V, I_C=10 mA ▲	....	500	....
Collector to Emitter Saturation Voltage	V_{CE}(sat)	I_C=1.0 mA, I_B=0.1 mA	....	0.35	volts
Base to Emitter Voltage	V_{BE}	V_{CE}=5.0 V, I_C=0.1 mA	0.5	0.7	volts
High Frequency Current Gain	hfe_1	V_{CE}=5.0 V, I_C=0.5 mA, f=30 mc	2.0	....	....
	hfe_2	V_{CE}=5.0 V, I_C=.05 mA, f=5.0 mc	2.4	....	....
Collector Capacitance	Cob	V_{CB}=5.0 V, I_E=0	....	6.0	pf
Input Capacitance	Cib	V_{EB}=0.5 V, I_C=0	....	6.0	pf

▲ Pulse width ≤ 300 μsec, Duty Cycle ≤ 2%

ELECTRICAL CHARACTERISTICS (con't): @25° C (unless otherwise noted)

	SYM.	CONDITIONS	MIN.	MAX.	UNITS
Small Signal Current Gain	hfe	V_{CE}=5.0 V, I_C=1.0 mA	80	450	....
Input Impedance	hie	V_{CE}=5.0 V, I_C=1.0 mA	1.5	13	KΩ
Output Admittance	hoe	V_{CE}=5.0 V, I_C=1.0 mA	....	30	μmhos
Voltage Feedback Ratio	hre	V_{CE}=5.0 V, I_C=1.0 mA	....	800	x 10^{-6}

NOISE CHARACTERISTICS: I_C=10 μA, V_{CE}=5.0 V

	SYM.	CONDITIONS	MAX.	UNITS
Noise Figure	NF_1	f=100 cps, R_g=10KΩ, BW=20 cps	15	db
	NF_2	f=1000 cps, R_g=10 KΩ, BW=200 cps	4.0	db
	NF_3	f=10 K cps, R_g=10 KΩ, BW=2.0 kc	3.0	db
	NF_4	f=10 cps to 10 kc, R_g=10 KΩ Equivalent noise power bandwidth=15.7 kc	4.0	db