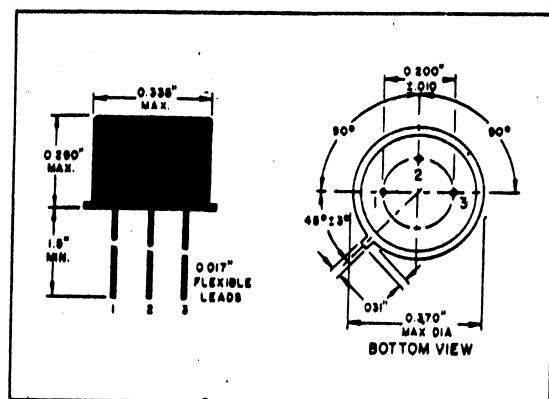


# New Jersey Semi-Conductor Products, Inc.

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**2N1034    2N1035**  
**2N1036    2N1037**



## **MECHANICAL DATA**

**CASE: TERMINAL CONNECTIONS:**

JEDEC TO-5

Lead 1 Emitter

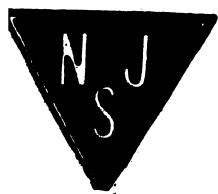
### Lead 2 Base

**Lead 3 Collector (All leads isolated from case)**

## ELECTRICAL DATA

#### **ABSOLUTE MAXIMUM RATINGS:**

	2N1034	2N1035	2N1036	2N1037	
Collector to Base Voltage $V_{CBO}$	-50	-50	-50	-50	volts
Collector to Emitter Voltage $V_{CEO}$	-40	-35	-30	-35	volts
Emitter to Base Voltage $V_{EBO}$	-20	-20	-20	-20	volts
Total Device Dissipation					
(i) Case Temperature 25°C	0.5	0.5	0.5	0.5	watts
(ii) Case Temperature 100°C	0.3	0.3	0.3	0.3	watts
(iii) Free Air Temperature 25°C	0.25	0.25	0.25	0.25	watts
Junction Temperature (Operating)					-65°C to +200°C
Storage Temperature					-65°C to +200°C



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.

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

	SYM.	CONDITIONS	2N1034	2N1035	2N1036	2N1037				
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	UNITS	
Collector to Base Breakdown Voltage	BVCBO	$I_C = 100\mu A$	-50	....	-50	....	-50	....	-50	.... volts
Collector to Emitter Breakdown Voltage	BVCEO	$I_C = 1mA$	-40	....	-35	....	-30	....	-35	.... volts
Emitter to Base Breakdown Voltage	BVEBO	$I_E = 100\mu A$	-20	....	-20	....	-20	....	-20	.... volts
Collector Cutoff Current	$I_{CBO_1}$ $I_{CBO_2}$	$V_{CB} = -30V$ $V_{CB} = -30V,$ $T = 125^\circ C$	....	1.0	....	1.0	....	1.0	....	$1.0 \mu A$
Emitter Cutoff Current	$I_{EBO_1}$ $I_{EBO_2}$	$V_{EB} = -20V$ $V_{EB} = -20V,$ $TA = 125^\circ C$	....	1.0	....	1.0	....	1.0	....	$1.0 \mu A$
Collector to Emitter Saturation Voltage	$V_{CE} (\text{Sat})$	$I_C = 8mA,$ $I_B = 2mA$	....	-0.5	....	-0.4	....	-0.3	....	-0.5 volts
Input Resistance	$h_{ie}$	$V_{CE} = -6V,$ $I_C = 1mA,$ $f = 1kc$	....	3.0	....	3.0	....	3.0	....	K 3.0 ohms

ELECTRICAL CHARACTERISTICS (cont.):

	SYM.	CONDITIONS	2N1034	2N1035	2N1036	2N1037				
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	UNITS	
Output Admittance	$h_{oe}$	$V_{CE} = -6V,$ $I_C = 1mA,$ $f = 1kc$	....	70	....	85	....	100	....	$85 \mu mhos$
Small Signal Current Gain	$h_{fe_1}$	$V_{CE} = -6V,$ $I_C = 1mA,$ $f = 1kc$	9	22	18	42	34	88	9	42
High Frequency Small Signal Current Gain	$h_{fe_2}$	$V_{CE} = -6V,$ $I_C = 1mA,$ $f = 100kc$	1.5	....	2.0	....	3.0	....	1.5	....
Collector Capacitance	$C_{ob}$	$V_{CE} = -6V,$ $I_C = 1mA,$ $f = 100kc$	....	110	....	110	....	110	....	110 pf
Noise Figure	NF	$f = 1kc,$ $R_g = 1k\Omega$	....	30	....	30	....	30	....	15 db