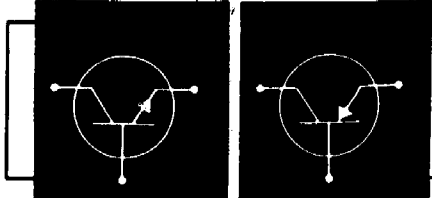


# New Jersey Semi-Conductor Products, Inc.

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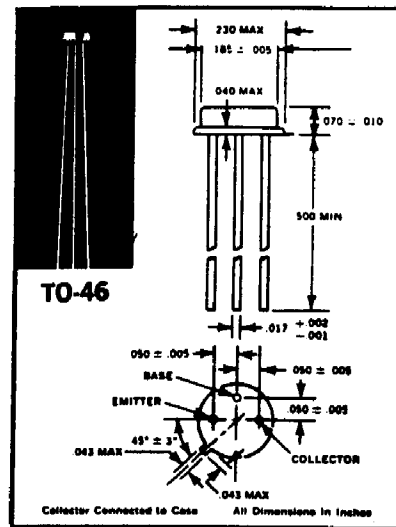
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	<b>ULTRA LOW <math>r_{EC}</math> (sat)</b> <b>SILICON EPITAXIAL JUNCTION</b> <b>NPN/PNP SWITCHING TRANSISTORS</b>	<b>2N6566</b>  <b>2N6567</b>
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- COMPLEMENTARY TYPES 2N6566(NPN), 2N6567(PNP)
- $r_{EC}$  (sat) 2 Ohms MAX.
- LOW  $C_{cb}$
- LOW LEAKAGE
- HIGH  $BV_{EBO}$

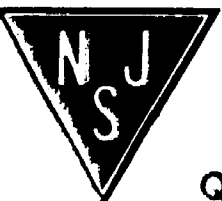
### ELECTRICAL DATA: ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	2N6566-2N6567	UNITS
Collector to Emitter Voltage	$BV_{CES}$	30	Volts
Emitter to Collector Voltage	$BV_{ECS}$	20	Volts
Collector to Base Voltage	$BV_{CBO}$	30	Volts
Emitter to Base Voltage	$BV_{EBO}$	30	Volts
Collector Current	$I_C$	100	mA
Power Dissipation	$P_C$	400	mW
Derating Factor	$DF$	2.3	mW/°C
Junction Temperature (operating and storage)	$T_J$	-85°C to +200°C	
Lead Temperature (1/16" ± 1/32" from case)	$T_L$	240°C for 10 sec.	



### ELECTRICAL CHARACTERISTICS: $T_A = 25^\circ\text{C}$ (UNLESS OTHERWISE STATED)

PARAMETER	SYMBOL	CONDITION	2N6566-2N6567			UNITS
			Min.	Typ.	Max.	
Collector To Base Leakage	$I_{CBO}$	$V_{CB} = V_{CBMAX.}$	-	0.2	0.5	nA
Emitter to Base Leakage	$I_{EBO}$	$V_{EB} = V_{EBMAX.}$	-	0.2	0.5	nA
Collector To Base Leakage	$I_{CBO}$	$V_{CB} = V_{CBMAX.}$ (TEMP = 100°C)	-	30	100	nA
Emitter To Base Leakage	$I_{EBO}$	$V_{EB} = V_{EBMAX.}$ (TEMP = 100°C)	-	30	100	nA
Offset Voltage	$V_O$	$I_B = 1\text{mA}$ $I_E = 0$	-	0.7	1.0	mV
DC Common Collector Forward Current Transfer Ratio	$h_{FC}$	$V_{EC} = 6V$ $I_E = 1\text{mA}$	30	-	-	-
High Frequency Current Gain	$h_{fe}$	$V_{CE} = 6V, I_C = 1\text{mA}$ $f = 1\text{MC}$	3	-	-	-
Inverted Dynamic Saturation Resistance	$r_{EC}$ (sat)	$I_E = 1.0\text{mA}$ $I_B = 10\text{mA}$ $f = 1\text{kHz}$	-	1.5	2	Ohms
Collector To Base Capacitance	$C_{cb}$	$V_{CB} = 6V, I_C = 1\text{mA}, f = 159\text{kHz}$	-	8	10	pf
Emitter To Base Capacitance	$C_{eb}$	$V_{EB} = 6V, I_E = 0, f = 159\text{kHz}$	-	5	6	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**