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

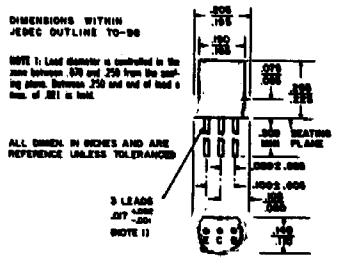
Silicon Transistors

PNP

2N5365,6,7

absolute maximum ratings: (25°C) (unless otherwise specified)

Voltages			
Collector to Emitter	V_{CEO}	−40	Volts
Emitter to Base	V_{EBO}	−4	Volts
Collector to Base	V_{CBO}	−40	Volts
Current			
Collector (Continuous)	I_C	300	mA
Collector (Pulsed, 10 μsec pulse width, = 2% Duty Cycle)	I_C	700	mA
Dissipation			
Total Power (Free Air at 25°C)*	P_T	360	mW
Total Power (Free Air at 55°C)*	P_T	260	mW
Temperature			
Storage	T_{stg}	−65 to +150	°C
Operating	T_j	+125	°C
Lead temperature, 1/16" ± 1/32" from case for ten seconds maximum	T_L	+260	°C



* *Derate 3.6 mW/°C increase in ambient temperature above 25°C.*

electrical characteristics: (25°C) (unless otherwise specified)

Static Characteristics			Min.	Max.	
Collector Cutoff Current					
(V_{CB} = −40V)		I_{CBO}		−100	nA
(V_{CB} = −40V, T_A = 100°C)		I_{CBO}		−10	μA
(V_{CB} = −40V)		I_{CES}		−100	nA
Emitter Cutoff Current (V_{EB} = −4V)		I_{EBO}		−10	μA
Forward Current Transfer Ratio					
(V_{CE} = −10V, I_C = −2 mA)	2N5365	h_{FE}	32		
(V_{CE} = −1V, I_C = −50 mA)	2N5365	h_{FE}	40	120	
(V_{CE} = −5V, I_C = − 300 mA)	2N5365	h_{FE}	20		
(V_{CE} = −10V, I_C = −2 mA)	2N5366	h_{FE}	80		
(V_{CE} = −1V, I_C = −50 mA)	2N5366	h_{FE}	100	300	
(V_{CE} = −5V, I_C = − 300 mA)	2N5366	h_{FE}	40		
(V_{CE} = −10V, I_C = −2 mA)	2N5367	h_{FE}	200		
(V_{CE} = −1V, I_C = −50 mA)	2N5367	h_{FE}	250	500	
(V_{CE} = −5V, I_C = − 300 mA)	2N5367	h_{FE}	75		
Collector Emitter Breakdown Voltage					
(I_C = −10 mA)		$V_{(BR)CEO}$	−40		Volts
Collector Saturation Voltage					
(I_C = −50 mA, I_B = −2.5 mA)		$V_{CE(sat)}$		−.250	Volts
(I_C = −300 mA, I_B = −30 mA)		$V_{CE(sat)}$		−1.0	Volts
Base Saturation Voltage					
(I_C = −50 mA, I_B = −2.5 mA)		$V_{BE(sat)}$		−1.1	Volts
(I_C = −300 mA, I_B = −30 mA)		$V_{BE(sat)}$		−2.0	Volts
Base Emitter Voltage					
(V_{CE} = −10V, I_C = −2 mA)		V_{BE}	−0.5	−0.8	Volts