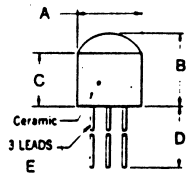
New Jersey Semi-Conductor Products, Inc.

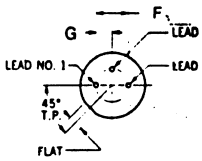
20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

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

2N3564

GENERAL DESCRIPTION - The 2N3564 is an NPN Silicon Transistor. It is designed for high-frequency wide-band amplifiers and is useful in low-power, small-signal tuned RF and IF applications.





PIN 1 EMITTER
2 BASE
3 COLLECTOR

DIM.	INCHES MIN.	TYP.	MAX.
A	.192		.222
B			.240
C	.100		.120
D	.500		
E	.016		.019
F		.100	
G		.050	

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature	-55°C to +125°C
Operating Junction Temperature	+125°C Maximum
Lead Temperature (Soldering, 10 sec. time limit)	+260°C Maximum

Maximum Power Dissipation

Total Dissipation at 25°C Case Temperature	0.5 Watt
at 65°C Case Temperature	0.3 Watt
at 25°C Ambient Temperature	0.2 Watt

Maximum Voltages

V_{CBO}	Collector to Base Voltage	30 Volts
V_{CEO}	Collector to Emitter Voltage	15 Volts
V_{EBO}	Emitter to Base Voltage	4.0 Volts

ELECTRICAL CHARACTERISTICS (25°C Free Air Temperature unless otherwise noted)

Symbol	Characteristics	Min.	Typ.	Max.	Units	Test Conditions
BV_{CBO}	Collector to Base Breakdown Voltage	30			Volts	I_C = 100 μA I_E = 0
BV_{EBO}	Emitter to Base Breakdown Voltage	4.0			Volts	I_E = 100 μA I_C = 0
BV_{CEO}(sust)	Collector to Emitter Sustaining Voltage	15			Volts	I_C = 10 mA I_B = 0
V_{CE}(sat)	Collector Saturation Voltage			0.3	Volts	I_C = 20 mA I_B = 2.0 mA
V_{BE}(sat)	Base Saturation Voltage			0.97	Volts	I_C = 20 mA I_B = 2.0 mA
I_{CBO}	Collector Cutoff Current			50	nA	V_{CB} = 15 V I_E = 0
h_{FE}	DC Pulse Current Gain	20	70			I_C = 15 mA V_{CE} = 10 V
h_{fe}	Low Frequency Current Gain (f = 1 Kc)	20	80			I_C = 15 mA V_{CE} = 10 V
h_{fe}	High Frequency Current Gain (f = 100 mc)	4.0	7.5			I_C = 15 mA V_{CE} = 10 V
r_b'	Real Part of h_{ie} (f = 350 mc)		30		ohms	I_C = 15 mA V_{CE} = 10 V
C_{obo}	Open Circuit Output Capacitance		2.5	3.5	pf	V_{CB} = 10 V I_E = 0