

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

2N6557
2N6558
2N6559

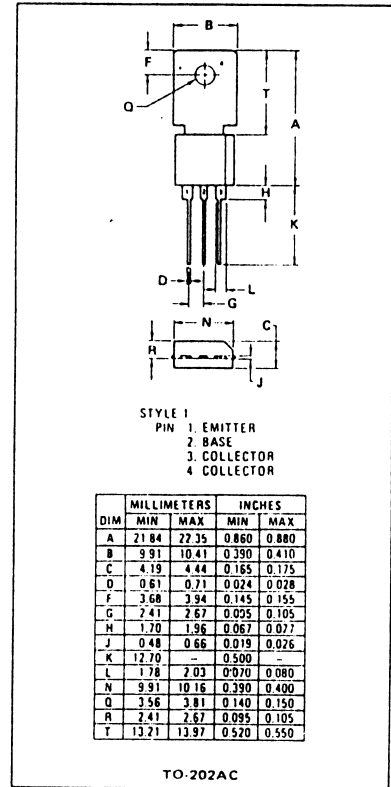
**NPN SILICON
 AMPLIFIER TRANSISTORS**

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

MAXIMUM RATINGS					
Rating	Symbol	2N6557	2N6558	2N6559	Unit
*Collector-Emitter Voltage	V _{CEO}	250	300	350	V _{dc}
*Collector-Base Voltage	V _{CBO}	250	300	350	V _{dc}
*Emitter-Base Voltage	V _{EB0}	← 6.0 →			V _{dc}
*Collector Current - Continuous	I _C	← 0.5 →			A _{dc}
Peak		← 0.7 →			
*Base Current	I _B	← 250 →			mA _{dc}
*Total Power Dissipation @ T _A = 25°C	P _D	← 2.0 →			Watts
Derate above 25°C		← .16 →			mW/°C
Total Power Dissipation @ T _C = 25°C	P _D	← 10 →			Watts
Derate above 25°C		← 80 →			mW/°C
*Operating and Storage Junction Temperature Range	T _{J, T_{stg}}	← -55 to +150 →			°C
*Solder Temperature, 1/16" from Case for 10 Seconds	-	← 260 →			°C

THERMAL CHARACTERISTICS			
Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	R _{θJA}	62.5	°C/W
Thermal Resistance, Junction to Case	R _{θJC}	12.5	°C/W

* Indicates JEDEC Registered Data.



*ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage (I _C = 1.0 mA _{dc} , I _B = 0)	BV _{CEO}	250 300 350	-	V _{dc}
Collector-Base Breakdown Voltage (I _C = 100 μA _{dc} , I _E = 0)	BV _{CBO}	250 300 350	-	V _{dc}
Emitter-Base Breakdown Voltage (I _E = 100 μA _{dc} , I _C = 0)	BV _{EB0}	6.0	-	V _{dc}
Collector Cutoff Current (V _{CB} = 150 V _{dc} , I _E = 0) (V _{CB} = 200 V _{dc} , I _E = 0) (V _{CB} = 250 V _{dc} , I _E = 0)	I _{CBO}	-	0.2 0.2 0.2	μA _{dc}
Emitter Cutoff Current (V _{BE} = 5.0 V _{dc} , I _C = 0)	I _{EB0}	-	0.1	μA _{dc}
ON CHARACTERISTICS(1)				
DC Current Gain (I _C = 1.0 mA _{dc} , V _{CE} = 10 V _{dc}) (I _C = 30 mA _{dc} , V _{CE} = 10 V _{dc})	h _{FE}	25 40	- 180	-
Collector-Emitter Saturation Voltage (I _C = 30 mA _{dc} , I _B = 3.0 mA _{dc}) (I _C = 50 mA _{dc} , I _B = 5.0 mA _{dc})	V _{CE(sat)}	-	0.6 1.5	V _{dc}
Base-Emitter On Voltage (I _C = 30 mA _{dc} , V _{CE} = 10 V _{dc})	V _{BE(on)}	-	0.85	V _{dc}
DYNAMIC CHARACTERISTICS				
Current-Gain - Bandwidth Product (I _C = 10 mA _{dc} , V _{CE} = 20 V _{dc} , f = 20 MHz)	f _T	45	200	MHz
Collector-Base Capacitance (V _{CB} = 20 V _{dc} , I _E = 0, f = 1.0 MHz)	C _{cb}	-	3.0	pF

* Indicates JEDEC Registered Data.
 (1) Pulse Test: Pulse Width < 300 μs, Duty Cycle < 2.0%.

