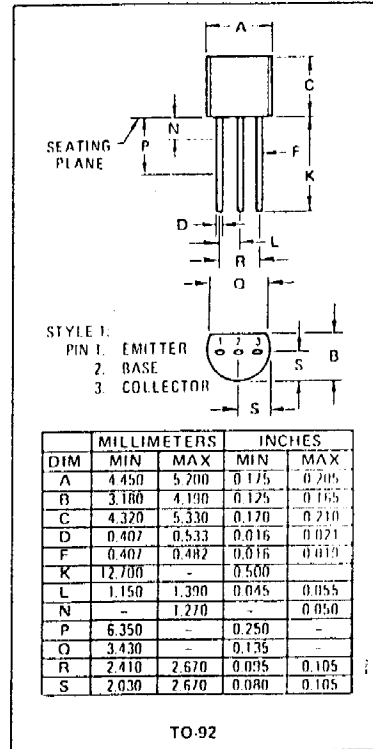


*MAXIMUM RATINGS			
Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	25	Vdc
Collector-Base Voltage	V_{CB}	25	Vdc
Emitter-Base Voltage	V_{EB}	4.0	Vdc
Collector Current - Continuous	I_C	500	mA/dc
Total Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	350 2.8	mW mW/ $^\circ\text{C}$
Total Power Dissipation @ $T_C = 25^\circ\text{C}$ Derate above 25°C	P_D	1.0 8.0	Watt mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	$T_{J, \text{stg}}$	-55 to +150	$^\circ\text{C}$

*THERMAL CHARACTERISTICS			
Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$ (1)	357	$^\circ\text{C/W}$
Thermal Resistance, Junction to Case	$R_{\theta JC}$	125	$^\circ\text{C/W}$

*Indicates JEDEC Registered Data.
(1) $R_{\theta JA}$ is measured with the device soldered into a typical printed circuit board.



*ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage (1) ($I_C = 10 \text{ mA dc}$, $I_B = 0$)	BV_{CEO}	25	-	Vdc
Collector-Base Breakdown Voltage ($I_C = 100 \mu\text{A dc}$, $I_E = 0$)	BV_{CBO}	25	-	Vdc
Emitter-Base Breakdown Voltage ($I_E = 100 \mu\text{A dc}$, $I_C = 0$)	BV_{EBO}	4.0	-	Vdc
Collector Cutoff Current ($V_{CB} = 15 \text{ Vdc}$, $I_E = 0$)	I_{CBO}	-	300	nA dc
Emitter Cutoff Current ($V_{BE} = 4.0 \text{ Vdc}$, $I_C = 0$)	I_{EBO}	-	500	nA dc
ON CHARACTERISTICS (1)				
DC Current Gain ($I_C = 10 \text{ mA dc}$, $V_{CE} = 10 \text{ Vdc}$) ($I_C = 50 \text{ mA dc}$, $V_{CE} = 10 \text{ Vdc}$)	h_{FE}	25 30	- 600	-
Collector-Emitter Saturation Voltage ($I_C = 100 \text{ mA dc}$, $I_B = 10 \text{ mA dc}$)	$V_{CE(sat)}$	-	0.8	Vdc
Base-Emitter Saturation Voltage ($I_C = 100 \text{ mA dc}$, $I_B = 10 \text{ mA dc}$)	$V_{BE(sat)}$	-	1.0	Vdc
DYNAMIC CHARACTERISTICS				
Current-Gain-Bandwidth Product ($I_C = 20 \text{ mA dc}$, $V_{CE} = 10 \text{ Vdc}$, $f = 20 \text{ MHz}$)	f_T	50	-	MHz
Collector-Base Capacitance ($V_{CB} = 5.0 \text{ Vdc}$, $I_E = 0$, $f = 1.0 \text{ MHz}$)	C_{cb}	-	20	pF
Small-Signal Current Gain ($I_C = 50 \text{ mA dc}$, $V_{CE} = 10 \text{ Vdc}$, $f = 1.0 \text{ kHz}$)	h_{fe}	30	1800	-

*Indicates JEDEC Registered Data

(1) Pulse Test: Pulse Width = 300 μs , Duty Cycle = 2.0%.