

TO-92 Plastic-Encapsulate Transistors

FEATURES

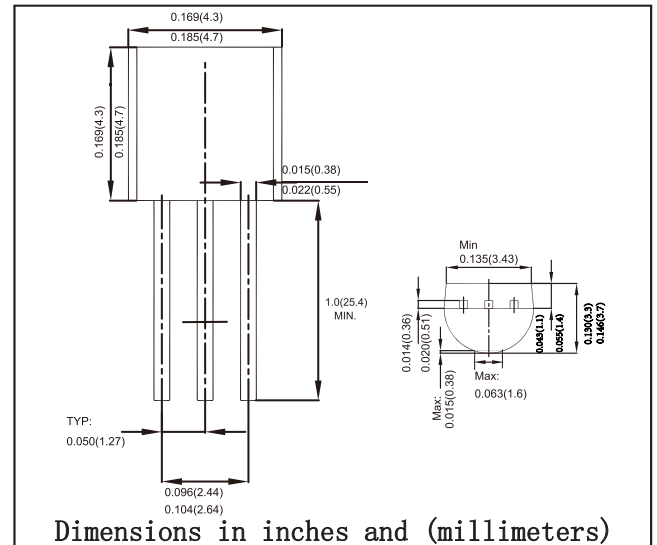
- Low Collector to Emitter Saturation Voltage
- Allowing Supply with the Radial Taping
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style:TO-92 molded plastic
- Mounting position:any

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)



Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Collector Power Dissipation	P_C	625	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	200	°C /W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.01mA, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=2mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.01mA, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=10V, I_C=0.5A$	85		340	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=1A$				
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=0.5A, I_B=0.05A$			0.4	V
Base-emitter voltage	V_{BE}	$V_{CE}=0.5V, I_C=0.05A$			1.2	V
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$			20	pF
Transition frequency	f_T	$V_{CE}=10V, I_C=0.05A, f=200MHz$		200		MHz

RATINGS AND CHARACTERISTIC CURVES

