

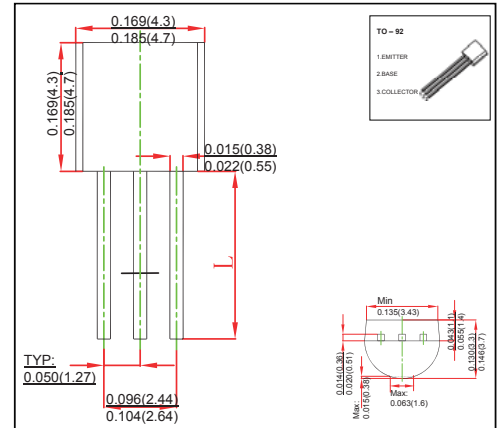
TO-92 Plastic-Encapsulate Transistors

FEATURES

- General Purpose Amplifier
- Low Noise UHF/VHF Amplifiers
- Low Frequency Drift, High Output UHF Oscillators
- 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_{CB0}	25	V
Collector-Emitter Voltage	V_{CE0}	18	V
Emitter-Base Voltage	V_{EB0}	4	V
Collector Current -Continuous	I_C	0.05	A
Collector Power Dissipation	P_D	400	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	12.5	°C / W
Junction Temperature	T_j	150	°C
Storage Temperature	stg	-55 ~ +150	°C

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.1\text{mA}, I_B=0$	18			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			0.1	nA
Collector cut-off current	I_{CEO}	$V_{CE}=15\text{V}, I_B=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3\text{V}, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=5\text{V}, I_C=1\text{mA}$	28		270	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			1.42	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=50\text{mA}, f=400\text{MHz}$		800		MHz

RATINGS AND CHARACTERISTIC CURVES

