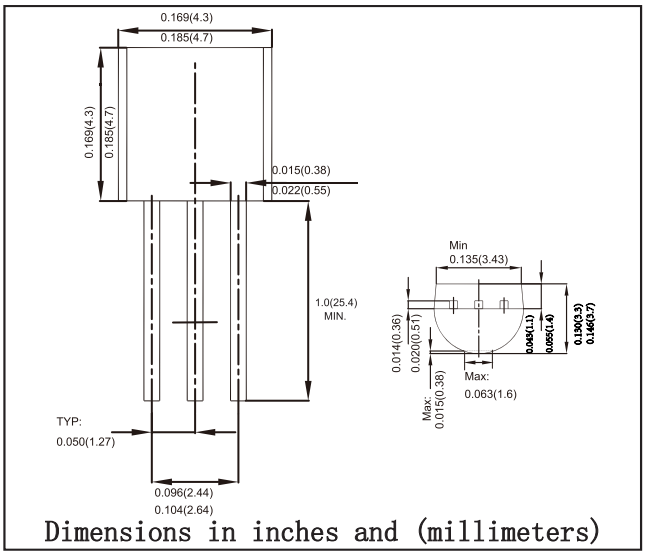
TO-92 Plastic-Encapsulate Transistors

FEATURES

- Switching and Amplification in High Voltage
- Applications such as Telephony
- Low Current(Max. 600mA)
- High Voltage(Max.160V)
- 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
Coll ector-Base Voltage	V_{CBO}	160	V
Coll ector-Emitter Voltage	V_{CEO}	140	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	0.6	A
Collector Power Dissipation	P_C	0.625	W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55-150	℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100 μ A,I_E=0	160			V
Collector-emitter voltage breakdown	$V_{(BR)CEO}$	I_C=1mA, I_B=0	140			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10 μ A, I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=100V,I_E=0			0.1	μ A
Emitter cut-off current	I_{EBO}	V_{EB}=4V, I_C=0			0.05	μ A
DC current gain	$h_{FE(1)}$	V_{CE}=5V,I_C=1mA	60			
	$h_{FE(2)}$	V_{CE}=5V,I_C =10mA	60		250	
	$h_{FE(3)}$	V_{CE}=5V,I_C=50mA	20			
Collector-emitter saturation voltage	V_{CEsat}	I_C= 10mA, I_B=1mA I_C= 50mA, I_B=5mA			0.15 0.25	V
Base-emitter saturation voltage	V_{BEsat}	I_C= 10mA, I_B=1mA I_C= 50mA, I_B=5 mA			1 1.2	V
Transition frequency	f_T	V_{CE}=10V,I_C=10mA,,f=100MHz	100		300	MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			6	pF
Noise figure	NF	V_{CE}=5V,I_c=0.25mA f=1KHZ,Rs=1kΩ			10	dB

RATINGS AND CHARACTERISTIC CURVES