

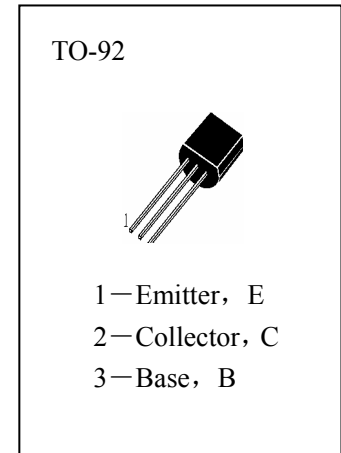


■ APPLICATIONS

Low Noise Audio Amplifier Application.

■ ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ )

- $T_{stg}$ —Storage Temperature.....  $-55\sim 150^{\circ}\text{C}$
- $T_j$ —Junction Temperature.....  $150^{\circ}\text{C}$
- $P_C$ —Collector Dissipation.....  $400\text{mW}$
- $V_{CBO}$ —Collector-Base Voltage.....  $60\text{V}$
- $V_{CEO}$ —Collector-Emitter Voltage.....  $50\text{V}$
- $V_{EBO}$ —Emitter-Base Voltage.....  $5\text{V}$
- $I_C$ —Collector Current.....  $150\text{mA}$



■ ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ )

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
ICBO	Collector Cut-off Current			0.1	$\mu\text{A}$	$V_{CB}=60\text{V}, I_E=0$
IEBO	Emitter Cut-off Current			0.1	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
HFE	DC Current Gain	200		700		$V_{CE}=6\text{V}, I_C=2\text{mA}$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.3	V	$I_C=10\text{mA}, I_B=1\text{mA}$
$V_{BE(on)}$	Base-Emitter On Voltage		0.65		V	$V_{CE}=6\text{V}, I_C=2\text{mA}$
$f_T$	Current Gain-Bandwidth Product		150		MHz	$V_{CE}=6\text{V}, I_C=1\text{mA}$
Cob	Output Capacitance		2.0		pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$
NF	Noise Figure		0.5	6	dB	$V_{CE}=6\text{V}, I_C=0.1\text{mA}$ $f=100\text{Hz}, R_g=10\text{K}\Omega$
NF	Noise Figure		0.2	3	dB	$V_{CE}=6\text{V}, I_C=0.1\text{mA}$ $f=1\text{KHz}, R_g=10\text{K}\Omega$

■  $h_{FE}$  Classification

GR	BL
200—400	350—700