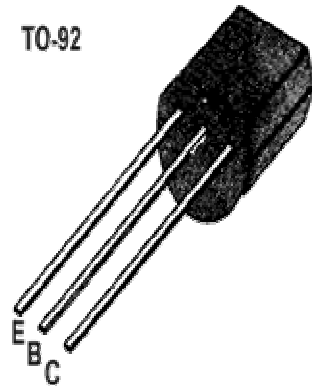


■ ■ APPLICATION: Audio Frequency Amplifier, High Frequency OSC.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CB0}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	0.15	A
Collector Power Dissipation	P_C	0.4	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55~150	$^\circ\text{C}$


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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h_{FE}	70	200	400		$V_{CE}=6\text{ V}, I_C=1\text{ mA}$
Collector Cut-off Current	I_{CBO}			100	nA	$V_{CB}=60\text{ V}, I_E=0$
Emitter Cut-off Current	I_{EBO}			100	nA	$V_{EB}=5\text{ V}, I_C=0$
Collector-Base Breakdown Voltage	BV_{CB0}	60			V	$I_C=0.1\text{ mA}, I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	50			V	$I_C=0.1\text{ mA}, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	5			V	$I_E=0.1\text{ mA}, I_C=0$
Base-Emitter Voltage	V_{BE}		0.62		V	$V_{CE}=6\text{ V}, I_C=1\text{ mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.15	0.3	V	$I_C=100\text{ mA}, I_B=10\text{ mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		0.86	1	V	$I_C=100\text{ mA}, I_B=10\text{ mA}$
Gain bandwidth product	f_T	150	250	450	MHz	$I_C=10\text{ mA}, V_{CE}=6\text{ V}$
Common Base Output Capacitance	C_{ob}		3.0	4.0	PF	$V_{CB}=6\text{ V}, I_E=0, f=1\text{ MHz}$
Noise Figure	N_F		8	15	dB	$V_{CE}=6\text{ V}, I_C=0.1\text{ mA}, f=1\text{ KHz}, R_g=2\text{ K}\Omega$

■ ■ h_{FE} Classification

Classification	O	Y	G
h_{FE}	70~140	120~240	200~400