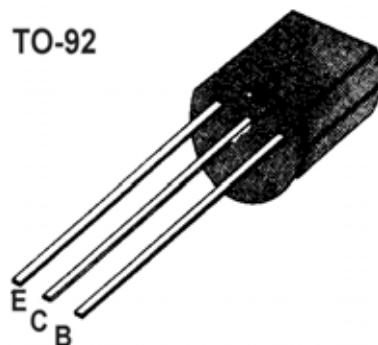


■■ APPLICATION: General purpose application, Switching application.

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

PARAMETER	SYMBOL	RATING	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	150	mA
Collector Power Dissipation	P_C	625	mW
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}	60		1000		$V_{CE}=5\text{V}, I_C=1\text{mA}$
Collector Cut-off Current	I_{CBO}			0.1	μA	$V_{CB}=50\text{V}, I_E=0$
Emitter Cut-off Current	I_{EBO}			0.1	μA	$V_{EB}=5\text{V}, I_C=0$
Collector-Base Breakdown Voltage	BV_{CBO}	60			V	$I_C=0.1\text{mA}, I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	50			V	$I_C=1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	5			V	$I_E=0.1\text{mA}, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.1	0.25	V	$I_C=100\text{mA}, I_B=10\text{mA}$
Gain bandwidth product	f_T	60			MHz	$I_C=1\text{mA}, V_{CE}=10\text{V}, f=100\text{MHz}$
Common Base Output Capacitance	C_{ob}		2.0	3.5	PF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$
Noise Figure	N_F		1.0	10	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 And Marking

Classification	A	B	C	D
h_{FE}	60~150	100~300	200~600	400~1000