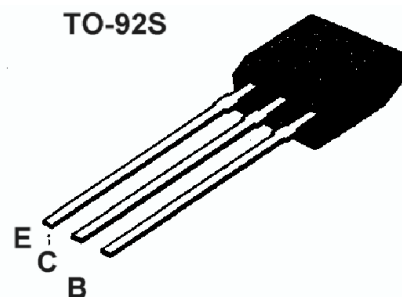


**APPLICATION:** General Purpose Amplify Application.**MAXIMUM RATINGS** ( $T_a=25^{\circ}\text{C}$ )

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	$V_{\text{CBO}}$	50	V
Collector-emitter voltage	$V_{\text{CEO}}$	40	V
Emitter-base voltage	$V_{\text{EBO}}$	5	V
Collector current	$I_{\text{C}}$	150	mA
Collector Power Dissipation	$P_{\text{C}}$	300	mW
Junction Temperature	$T_{\text{J}}$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	- 55~150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	$h_{\text{FE}}$	120		820		$V_{\text{CE}}=6\text{V}$ , $I_{\text{C}}=1\text{mA}$
Collector Cut-off Current	$I_{\text{CBO}}$			0.5	$\mu\text{A}$	$V_{\text{CB}}=30\text{V}$ , $I_{\text{E}}=0$
Emitter Cut-off Current	$I_{\text{EBO}}$			0.5	$\mu\text{A}$	$V_{\text{EB}}=4\text{V}$ , $I_{\text{C}}=0$
Collector-Base Breakdown Voltage	$\text{BV}_{\text{CBO}}$	50			V	$I_{\text{C}}=0.02\text{mA}$ , $I_{\text{E}}=0$
Collector-Emitter Breakdown Voltage	$\text{BV}_{\text{CEO}}$	40			V	$I_{\text{C}}=1\text{mA}$ , $I_{\text{B}}=0$
Emitter-Base Breakdown Voltage	$\text{BV}_{\text{EBO}}$	5			V	$I_{\text{E}}=0.02\text{mA}$ , $I_{\text{C}}=0$
Collector-Emitter Saturation Voltage	$V_{\text{CE(sat)}}$			0.4	V	$I_{\text{C}}=50\text{mA}$ , $I_{\text{B}}=5\text{mA}$
Base-Emitter Saturation Voltage	$V_{\text{BE(sat)}}$			1.0	V	$I_{\text{C}}=50\text{mA}$ , $I_{\text{B}}=5\text{mA}$
Gain bandwidth product	$f_{\text{T}}$		180		MHz	$I_{\text{C}}=2\text{mA}$ , $V_{\text{CE}}=12\text{V}$
Common Base Output Capacitance	$C_{\text{ob}}$		2		PF	$V_{\text{CB}}=10\text{V}$ , $I_{\text{E}}=0$ , $f=1\text{MHz}$

 **$h_{\text{FE}}$  Classification**

Classification	Q	R	S	E
$h_{\text{FE}}$	120~270	180~390	270~560	390~820