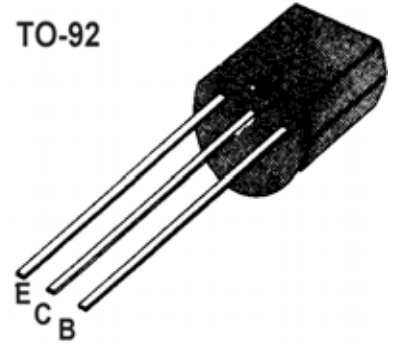


**■ ■ APPLICATION:** POWER AMPLIFIER APPLICATION, SWITCH APPLICATION.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	$V_{CB0}$	-40	V
Collector-emitter voltage	$V_{CEO}$	-25	V
Emitter-base voltage	$V_{EBO}$	-6	V
Collector current	$I_C$	-1.5	A
Collector Power Dissipation	$P_C$	1	W
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	- 55~150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	$h_{FE}$	85		300		$V_{CE} = -1\text{ V}$ , $I_C = -100\text{ mA}$
Collector Cut-off Current	$I_{CBO}$			-0.1	$\mu\text{A}$	$V_{CB} = -35\text{ V}$ , $I_E = 0$
Emitter Cut-off Current	$I_{EBO}$			-0.1	$\mu\text{A}$	$V_{EB} = -6\text{ V}$ , $I_C = 0$
Collector-Base Breakdown Voltage	$BV_{CB0}$	-40			V	$I_C = -0.1\text{ mA}$ , $I_E = 0$
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	-25			V	$I_C = -2\text{ mA}$ , $I_B = 0$
Emitter-Base Breakdown Voltage	$BV_{EBO}$	-6			V	$I_B = -0.1\text{ mA}$ , $I_C = 0$
Base-Emitter Voltage	$V_{BE}$			-1	V	$V_{CE} = -1\text{ V}$ , $I_C = -10\text{ mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.28	-0.5	V	$I_C = -800\text{ mA}$ , $I_B = -80\text{ mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.96	-1.2	V	$I_C = -800\text{ mA}$ , $I_B = -80\text{ mA}$
Gain bandwidth product	$f_T$	100			MHz	$I_C = -50\text{ mA}$ , $V_{CE} = -10\text{ V}$
Common Base Output Capacitance	$C_{ob}$		15	30	PF	$V_{CB} = -10\text{ V}$ , $I_E = 0$ , $f = 1\text{ MHz}$

**■ ■  $h_{FE}$  Classification**

Classification	B	C	D
$h_{FE}$	85~160	120~200	160~300