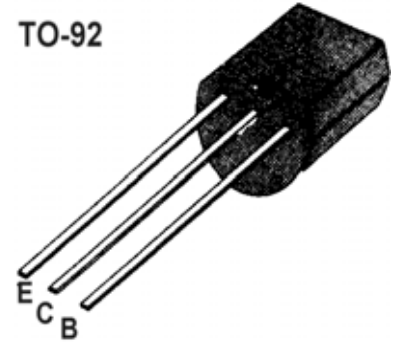


■■ APPLICATION: General purpose application, Switching application.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	-60	V
Collector-emitter voltage	V_{CEO}	-40	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-500	mA
Collector Power Dissipation	P_C	600	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		320		$V_{CE} = -5\text{V}$, $I_C = -50\text{mA}$
Collector Cut-off Current	I_{CBO}			-1	μA	$V_{CB} = -40\text{V}$, $I_E = 0$
Emitter Cut-off Current	I_{EBO}			-1	μA	$V_{EB} = -4\text{V}$, $I_C = 0$
Collector-Base Breakdown Voltage	BV_{CBO}	-60			V	$I_C = -0.1\text{mA}$, $I_E = 0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	-40			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	$V_{CE(sat)}$		-0.25	-0.6	V	$I_C = -400\text{mA}$, $I_B = -40\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	-1.2	V	$I_C = -400\text{mA}$, $I_B = -40\text{mA}$
Gain bandwidth product	f_T		120		MHz	$I_C = -10\text{mA}$, $V_{CE} = -10\text{V}$
Common Base Output Capacitance	C_{ob}		9		PF	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$

■■ h_{FE} Classification

Classification	D	E	F
h_{FE}	60~120	100~200	160~320