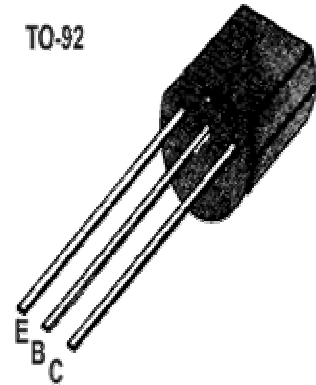


■■APPLICATION: POWER AMPLIFIER APPLICATION, SWITCH APPLICATION.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	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	$^\circ\text{C}$


■■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	μA	$V_{CB}=35\text{ V}, I_E=0$
Emitter Cut-off Current	I_{EBO}			0.1	μA	$V_{EB}=6\text{ V}, I_C=0$
Collector-Base Breakdown Voltage	BV_{CBO}	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	$I_B=0.1\text{ mA}, I_C=0$
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	$V_{BE(sat)}$		0.98	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}		9	20	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