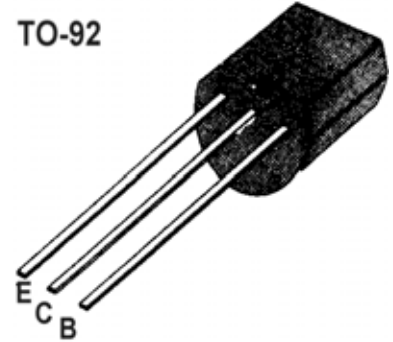


■■ APPLICATION: POWER AMPLIFIER APPLICATION.
SWITCHING APPLICATION.
■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	40	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	4	V
Collector current	I_C	20	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	- 55~150	°C

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■■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h_{FE}	40		200		$V_{CE}= 6V, I_C= 1mA$
Collector Cut-off Current	I_{CBO}			0.5	μA	$V_{CB}= 40V, I_E=0$
Emitter Cut-off Current	I_{EBO}			0.5	μA	$V_{EB}= 4V, I_C=0$
Collector-Base Breakdown Voltage	BV_{CBO}	40			V	$I_C= 0.1mA, I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	30			V	$I_C= 1mA, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	4			V	$I_E= 0.1mA, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.2	V	$I_C= 15mA, I_B= 1.5mA$
Gain bandwidth product	f_T		550		MHz	$I_C= 1mA, V_{CE}= 6V$
Common Base Output Capacitance	C_{ob}		0.7		PF	$V_{CB}= 6V, I_E=0, f= 1MHz$
Power Gain	G_P		18		dB	$V_{CE}= 6V, I_E= -1mA, f= 100MHz$
Noise Figure	N_F		2.5	5.0	dB	$V_{CE}= 6V, I_E= -1mA, f= 100MHz$

■■ h_{FE} Classification

Classification	R	O	Y
h_{FE}	40~80	70~140	100~200