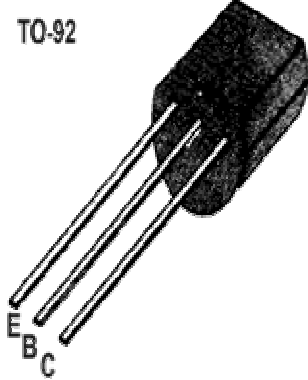


■ ■ APPLICATION: General purpose application, Switching application.

■ ■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CBO}	50	V
Collector-emitter voltage	V _{CEO}	45	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	100	mA
Collector Power Dissipation	P _C	400	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	- 55~150	°C



■ ■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h _{FE}	60		1000		V _{CE} = 5 V, I _C = 1 mA
Collector Cut-off Current	I _{CBO}			0.1	μA	V _{CB} = 50V, I _E =0
Emitter Cut-off Current	I _{EBO}			0.1	μA	V _{EB} = 5 V, I _C =0
Collector-Base Breakdown Voltage	BV _{CBO}	50			V	I _C = 0.1mA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	45			V	I _C = 1 mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	5			V	I _E = 0.1mA, I _C =0
Base-Emitter Voltage	V _{BE (on)}	0.58	0.63	0.7	V	V _{CE} = 5V, I _C = 2mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}		0.14	0.3	V	I _C = 100mA, I _B = 10mA
Base-Emitter Saturation Voltage	V _{BE(sat)}		0.84	1.0	V	I _C = 100mA, I _B = 10mA
Gain bandwidth product	f _T	150	270		MHz	I _C = 10mA, V _{CE} = 5V
Common Base Output Capacitance	C _{ob}		2.2	3.5	PF	V _{CB} = 10V, I _E =0, f= 1 MHz
Noise Figure	N _F		0.9	10	dB	V _{CE} = 5V, I _C = 0.2mA, f= 1KHz, R _g = 2KΩ

■ ■ h_{FE} Classification

Classification	A	B	C	D
h _{FE}	60~150	100~300	200~600	400~1000