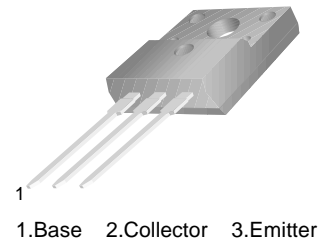


■■APPLICATION: High Voltage Switching and Amplifier Application. —NPN silicon—

■■MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CB0}	300	V
Collector-emitter voltage	V _{CEO}	300	V
Emitter-base voltage	V _{EBO}	7	V
Collector current	I _c	100	mA
Base current	I _B	10	mA
Collector Power Dissipation (Ta=25°C)	P _C	2	W
Collector Power Dissipation (Tc=25°C)		8	W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	- 55~150	°C

TO-220F



1.Base 2.Collector 3.Emitter

■■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h _{FE1}	30		200		V _{CE} = 10V, I _c = 20mA
	h _{FE2}	20				V _{CE} = 10V, I _c =40 mA
Collector Cut-off Current	I _{CBO}			1	μA	V _{CB} = 240V, I _E =0
Emitter Cut-off Current	I _{EBO}			1	μA	V _{EB} = 7V, I _c =0
Collector-Base Breakdown Voltage	BV _{CB0}	300			V	I _c = 0.1mA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	300			V	I _c = 1mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	7			V	I _E = 0.1mA, I _c =0
Collector-Emitter Saturation Voltage	V _{CE(sat)}			1	V	I _c = 10mA, I _B =1 mA
Base-Emitter Saturation Voltage	V _{BE(sat)}			1	V	I _c = 10mA, I _B = 1mA
Gain bandwidth product	f _T	50	70		MHz	I _c = 20mA, V _{CE} = 10V
Common Base Output Capacitance	C _{ob}		3		PF	V _{CB} = 20V, I _E =0, f= 1MHz

■■hFE Classification

Print Mark	R	O	Y
h _{FE1}	30~80	60~120	100~200