

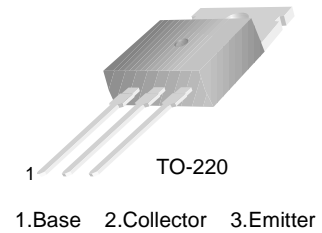


■■ APPLICATION: FREQUENCY AMPLIFIER APPLICATION,

—NPN silicon—

■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CBO}	300	V
Collector-emitter voltage	V _{CEO}	300	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	100	mA
Collector Power Dissipation (Ta=25°C)	P _C	2	W
Collector Power Dissipation (Tc=25°C)	P _C	10	W
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		200		V _{CE} =10 V, I _C =10 mA
Collector Cut-off Current	I _{CBO}			0.5	μA	V _{CB} = 200V, I _E =0
Emitter Cut-off Current	I _{EBO}			0.5	μA	V _{EB} = 4V, I _C =0
Collector-Base Breakdown Voltage	BV _{CBO}	300			V	I _C = 0.05mA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	300			V	I _C =0.1 mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	5			V	I _E =0.05 mA, I _C =0
Collector-Emitter Saturation Voltage	V _{CE(sat)}		0.2	1	V	I _C =50 mA, I _B = 5mA
Gain bandwidth product	f _T	50	100		MHZ	V _{CE} = 30V, I _E =-20 mA, f=30MHZ
Common Base Output Capacitance	C _{ob}		3		PF	V _{CB} = 30V, I _E =0, f= 1MHZ

■■ hFE Classification And Marking

Print Mark	C5147	
Classification	D	E
h _{FE}	100-150	150-200