

APPLICATION: Audio Power Amplifier Applications.

MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CBO}	30	V
Collector-emitter voltage	V _{CEO}	30	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	2	A
Collector Power Dissipation	P _C	1	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}	100		320		V _{CE} = 2V, I _C = 500mA
Collector Cut-off Current	I _{CBO}			0.1	μA	V _{CB} = 30V, I _E =0
Emitter Cut-off Current	I _{EBO}			0.1	μA	V _{EB} = 5V, I _C =0
Collector-Base Breakdown Voltage	BV _{CBO}	30			V	I _C = 0.1mA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	30			V	I _C = 10mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	5			V	I _E = 0.1mA, I _C =0
Base-Emitter Voltage	V _{BE}			1	V	V _{CE} = 2V, I _C = 500mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}			2	V	I _C = 1.5A, I _B = 30mA
Gain bandwidth product	f _T		120		MHz	I _C = 500mA, V _{CE} = 2V
Common Base Output Capacitance	C _{ob}		30		PF	V _{CB} = 10V, I _E =0, f = 1MHz

hFE Classification

Classification	O	Y
h _{FE}	100~200	160~320