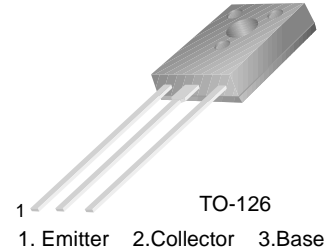


■■ APPLICATION: Low Frequency Power Amplifier Applications.

■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CBO</sub>	120	V
Collector-emitter voltage	V <sub>CEO</sub>	120	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	1	A
Power Dissipation(Ta=25°C)	P <sub>C</sub>	1	W
Power Dissipation(Tc=25°C)	P <sub>C</sub>	8	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C



■■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Common Emitter DC Current Gain	h <sub>FE1</sub>	60		320		V <sub>CE</sub> = 5V, I <sub>C</sub> = 50mA
	h <sub>FE2</sub>	20				V <sub>CE</sub> = 5V, I <sub>C</sub> = 500mA
Collector Cut-off Current	I <sub>CBO</sub>			1	μ A	V <sub>CB</sub> = 50V, I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			1	μ A	V <sub>EB</sub> = 4V, I <sub>C</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CBO</sub>	120			V	I <sub>C</sub> = 0.01mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	120			V	I <sub>C</sub> = 1mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	5			V	I <sub>E</sub> = 0.01mA, I <sub>C</sub> =0
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>		0.15	0.4	V	I <sub>C</sub> = 500mA, I <sub>B</sub> = 50mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>		0.85	1.2	V	I <sub>C</sub> = 500mA, I <sub>B</sub> = 50mA
Gain bandwidth product	f <sub>T</sub>	50	130		MHz	I <sub>C</sub> = 50mA, V <sub>CE</sub> = 10V
Output Capacitance	C <sub>ob</sub>		20		pF	V <sub>CB</sub> = 10V, I <sub>E</sub> =0, f = 1MHz
Fall Time	t <sub>f</sub>		100		ns	V <sub>CE</sub> = 12V, P <sub>w</sub> =20 μ s I <sub>C</sub> =10I <sub>B1</sub> =-10I <sub>B2</sub> = 500 mA
Turn-off Time	t <sub>off</sub>		500		ns	
Storage Time	t <sub>stg</sub>		700		ns	

■■ hFE Classification

Classification	D	E	F
h <sub>FE1</sub>	60~120	100~200	160~320