

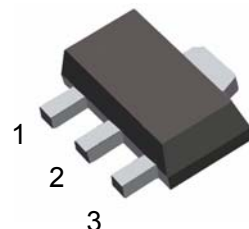
■■ APPLICATION: Low-Frequency Power Amplifier Applications.

■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	30	2V
Collector-emitter voltage	V <sub>CEO</sub>	25	V <sup>3</sup>
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>c</sub>	1	A
Collector Power Dissipation	P <sub>c</sub>	1	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C

**SOT-89**

- 1. BASE
- 2. COLLECTOR
- 3. EMITTER



■■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Collector-Base Breakdown Voltage	BV <sub>cb0</sub>	30			V	I <sub>c</sub> =10uA I <sub>e</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>ceo</sub>	25			V	I <sub>c</sub> =2mA I <sub>b</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>ebo</sub>	5			V	I <sub>e</sub> =10uA I <sub>c</sub> =0
Collector Cut-off Current	I <sub>cbo</sub>			0.1	uA	V <sub>cb</sub> =20V I <sub>e</sub> =0
Collector-Emitter Saturation Voltage	V <sub>ce(sat)</sub>		0.2	0.4	V	I <sub>c</sub> =0.5A I <sub>b</sub> =50mA
Base-Emitter Saturation Voltage	V <sub>be(sat)</sub>		0.85	1.2	V	I <sub>c</sub> =0.5A I <sub>b</sub> =50mA
DC Current Gain	h <sub>FE</sub>	85	160	340	β	V <sub>ce</sub> =10V I <sub>c</sub> =0.5A
Gain bandwidth product	f <sub>T</sub>		200		MHz	V <sub>ce</sub> =10V I <sub>e</sub> =-50mA f=100MHz
Common Base Output Capacitance	C <sub>ob</sub>			20	pF	V <sub>cb</sub> =10 V I <sub>e</sub> =0 f=1MHz

■■ h<sub>FE</sub> Classification And Marking

Print Mark	ZQ	ZR	ZS
Classification	Q	R	S
h <sub>FE</sub>	85~170	120~240	170~340