

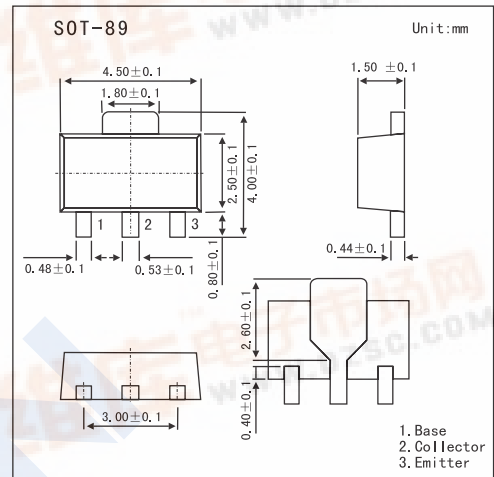
SMD Type Transistors

Power Amplifier Applications

2SA1202

Features

- Suitable for Driver of 30 to 35 Watts Audio Amplifier
- Small Flat Package
- $P_c = 1$ to 2W (mounted on ceramic substrate)
- Complementary to 2SC2882



Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-80	V
Collector-Emitter Voltage	V_{CE0}	-80	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_c	-400	mA
Base Current	I_B	-80	mA
Collector Power Dissipation	P_c	500	mW
	P_c^*	1000	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

* Mounted on ceramic substrate (250 mm² x 0.8 t)

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB} = -80V, I_E = 0$			-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-80			V
DC Current Gain	h_{FE}	$I_E = -2\text{mA}, I_C = -50\text{mA}$	70		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -200\text{mA}, I_B = -20\text{mA}$			-0.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -2V, I_C = -5\text{mA}$	-0.55		-0.8	V
Transition Frequency	f_T	$V_{CE} = -10V, I_C = -10\text{mA}$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1\text{MHz}$		14		pF



2SA1202

hFE Classification

Marking	F	
Rank	O	Y
hFE	70 ~ 140	120 ~ 240

Electrical Characteristics Curves

