

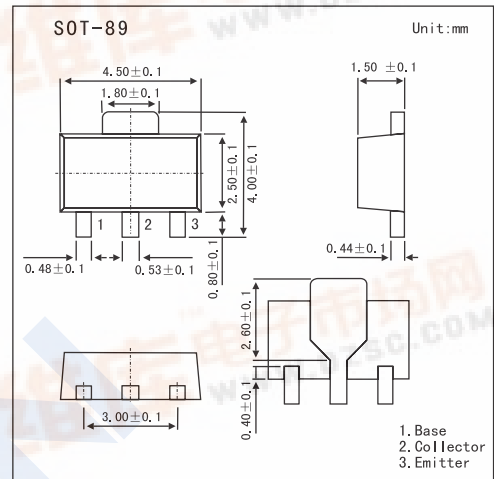
SMD Type Transistors

Audio Frequency Amplifier Applications

2SA1204

Features

- Suitable For Output Stage of 1 Watts Amplifier
- Small Flat Package
- $P_c = 1$ to 2W (mounted on ceramic substrate)
- Complementary to 2SC2884



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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-35	V
Collector-Emitter Voltage	V_{CE0}	-30	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_c	-800	mA
Base Current	I_B	-160	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}	$V_{CB} = -35V, I_E = 0$			-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C = -10\text{mA}, I_B = 0$	-30			V
DC Current Gain	h_{FE}	$V_{CE} = -1V, I_C = -100\text{mA}$	100		320	
		$V_{CE} = -1V, I_C = -700\text{mA}$	35			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -20\text{mA}$			-0.7	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -1V, I_C = -10\text{mA}$	-0.5		-0.8	V
Transition Frequency	f_T	$V_{CE} = -5V, I_C = -10\text{mA}$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1\text{MHz}$		19		pF



2SA1204

hFE Classification

Marking	R	
Rank	O	Y
hFE	100 ~ 200	160 ~ 320

Electrical Characteristics Curves

