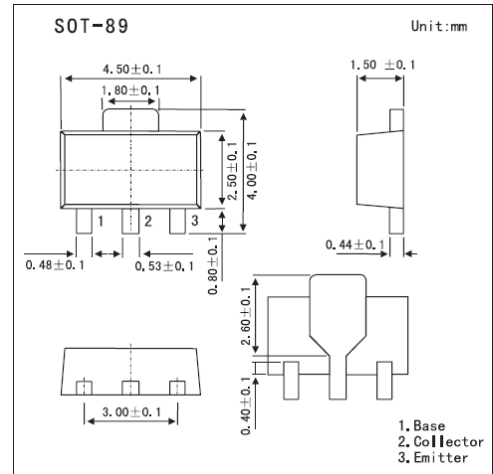


Voltage Amplifier Applications

Features

- High Voltage : $V_{CE0} = 120V$
- High Transition Frequency : $f_T = 120MHz$ (typ.)
- Small Flat Package
- Complementary to 2SA1201



Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CE0}	120	V
Collector-Base Voltage	V_{CB0}	120	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	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

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

Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Emitter Cut-off Current	I_{E0}	$V_{EB} = 5V, I_C = 0$			0.1	μA
Collector Cut-off Current	I_{C0}	$V_{CB} = 120V, I_E = 0$			0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C = 10mA, I_B = 0$	120			V
Emitter-Base Breakdown Voltage	$V_{(BR)EB0}$	$I_E = 1mA, I_C = 0$	5			V
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 100mA$	80		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$			1	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 500mA$			1	V
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 100mA$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$			30	pF

hFE Classification

Marking	C	
Rank	O	Y
hFE	80~160	120~240

Electrical Characteristics Curves

