

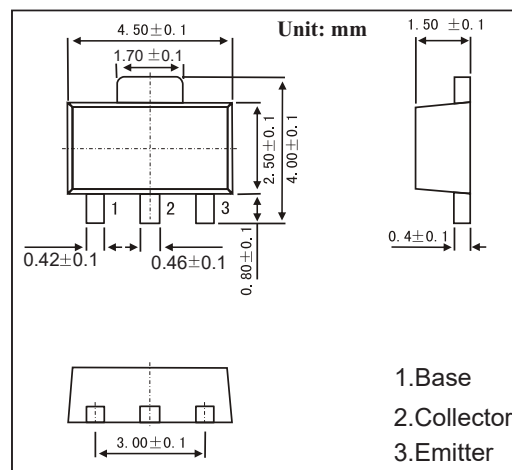
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- Suitable for output stage of 3 watts amplifier
- Small flat package
- PC = 1.0 to 2.0 W
- NPN Transistors

MECHANICAL DATA

- Case style:SOT-89molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	30	V
Collector - Emitter Voltage	V _{CEO}	30	
Emitter - Base Voltage	V _{EB0}	5	
Collector Current - Continuous	I _C	1.5	A
Base Current	I _B	0.3	
Collector Power Dissipation (Note.1)	P _C	500	mW
		1000	
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to +150	

Note.1: Mounted on a ceramic substrate (250 mm² × 0.8 t)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = 1mA, I _E = 0	30			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 10mA, I _B = 0	30			
Emitter - base breakdown voltage	V _{EB0}	I _E = 1mA, I _C = 0	5			
Collector-base cut-off current	I _{CB0}	V _{CB} = 30V, I _E = 0			0.1	uA
Emitter cut-off current	I _{EB0}	V _{EB} = 5V, I _C =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1.5A, I _B =30mA			2	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =1.5A, I _B =30mA			1.2	
Base - emitter voltage	V _{BE}	V _{CE} = 2V, I _C = 500mA			1	
DC current gain	h _{FE}	V _{CE} = 2V, I _C = 500mA	100		320	
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz			40	pF
Transition frequency	f _T	V _{CE} = 2V, I _C = 500mA		120		MHz

RATINGS AND CHARACTERISTIC CURVES

