

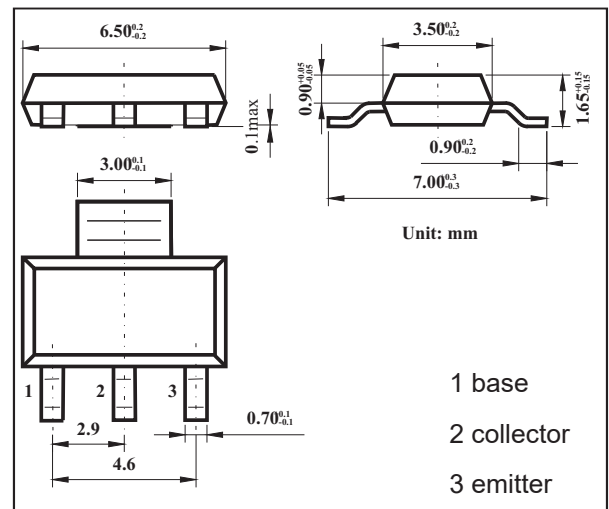
SOT-223 Plastic-Encapsulate Transistors

FEATURES

- NPN Medium Power Transistor
- For AF driver and output stages
- High collector current
- Low collector-emitter saturation voltage

MECHANICAL DATA

- Case style:SOT-223 molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
collector-base voltage	V_{CBO}	100	V
collector-emitter voltage	V_{CEO}	80	V
emitter-base voltage	V_{EBO}	5	V
collector current (DC)	I_C	1	A
peak collector current (tP< 5ms)	I_{CM}	1.5	A
power dissipation	P_D	1.5	W
thermal resistance from junction to ambient	$R_{\theta JA}$	94	°C/W
junction temperature	T_j	150	°C
storage temperature	T_{stg}	-65 to +150	°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1mA, I_E = 0$	100			
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	80			
Base-emitter breakdown voltage	$V_{(BR)EBO}$	$I_C = 10\mu A, I_E = 0$	5			
Collector cut-off current	I_{CBO}	$I_E = 0A; V_{CB} = 30V$			100	nA
Emitter cut-off current	I_{EBO}	$I_C = 0A; V_{EB} = 5V$			100	nA
DC current gain	h_{FE}	$I_C = 5mA; V_{CE} = 2V$	25			
		$I_C = 150mA; V_{CE} = 2V$	100		250	
		$I_C = 500mA; V_{CE} = 2V$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA; I_B = 50mA$			0.5	V
Transition frequency	f_T	$I_C = 10mA; V_{CE} = 5V; f = 100MHz$		130		MHz

RATINGS AND CHARACTERISTIC CURVES

