

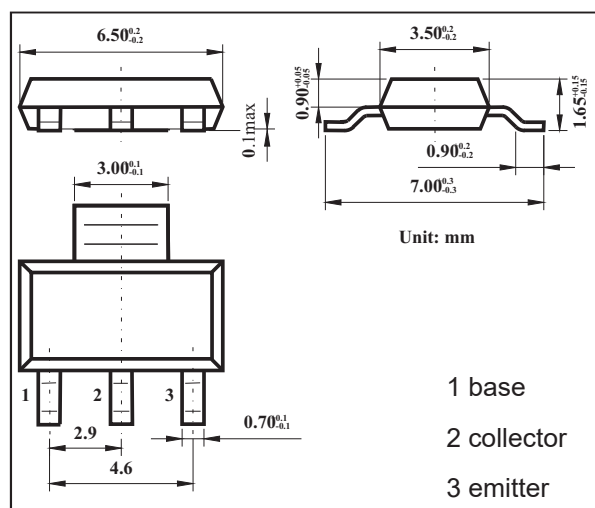
## SOT-223 Plastic-Encapsulate Transistors

### 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	$I_{CBO}$	$I_E = 0 A; V_{CB} = 30 V$			100	nA
Emitter cut-off current	$I_{EBO}$	$I_C = 0 A; V_{EB} = 5 V$			100	nA
DC current gain	$h_{FE}$	$I_C = 5 mA; V_{CE} = 2 V$	25			
		$I_C = 150 mA; V_{CE} = 2 V$	100		250	
		$I_C = 500 mA; V_{CE} = 2 V$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA; I_B = 50 mA$			0.5	V
Transition frequency	$f_T$	$I_C = 10 mA; V_{CE} = 5 V; f = 100 MHz$		130		MHz

## RATINGS AND CHARACTERISTIC CURVES

