

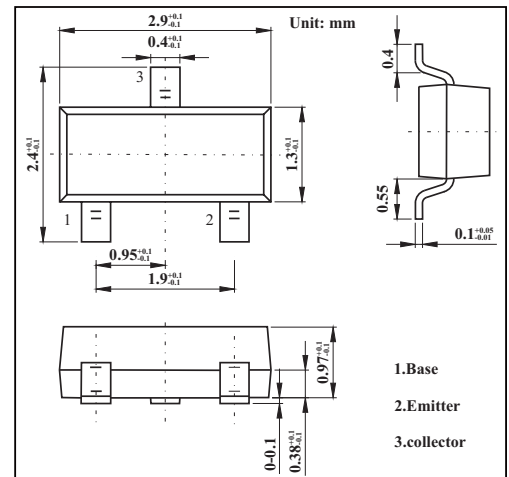
## SOT-23 Plastic-Encapsulate Transistors

### FEATURES

- High  $I_{CMax}$ .  $I_{CMax} = 0.5A$
- Low  $V_{CE(sat)}$ . Optimal for low voltage operation
- NPN silicon transistor
- Medium Power Transistor

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	40	V
Collector-emitter voltage	$V_{CEO}$	32	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	0.5	A
Collector power dissipation	$P_C$	0.2	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CBO}$	$I_C = 100\mu A$	40			V
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C = 1mA$	32			V
Emitter-base breakdown voltage	$V_{EBO}$	$I_E = 100\mu A$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB} = 20V$			1	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 4V$			1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = 3V, I_C = 100mA$	120		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B = 500mA/50mA$			0.6	V
Output capacitance	$C_{ob}$	$V_{CB} = 10V, I_E = 0A, f = 1MHz$		6.5		pF
Transition frequency	$f_T$	$V_{CE} = 5V, I_E = -20mA, f = 100MHz$		250		MHz