

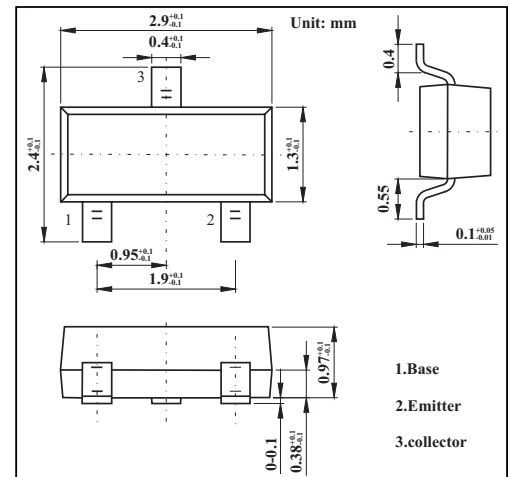
SOT-23 Plastic-Encapsulate Transistors

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	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 4V$			1	μA
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