



SOT-23 Plastic-Encapsulate Transistors

BFS20 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.25 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.025 A

Collector-base voltage

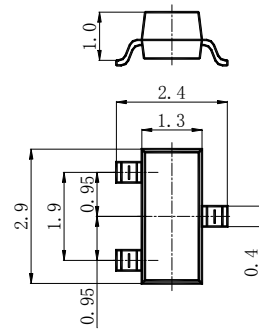
$V_{(BR)CBO}$: 30 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-23

- 1. BASE
- 2. EMITTER
- 3. COLLECTOR



Unit: mm

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu A, I_B=0$	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=15V, I_B=0$			0.1	μA
Collector cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=7mA$	40		120	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.3	V
Base-emitter voltage	$V_{BE(on)}$	$I_C=7mA, V_{CE}=10V$			0.9	V
Transition frequency	f_T	$V_{CE}=10V, I_C=5mA$ $f=100MHz$	275			MHz

Marking

G11