

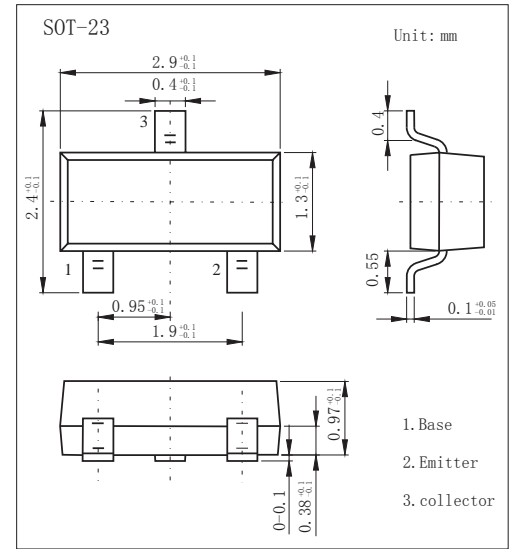
SOT-23 Plastic-Encapsulate Transistors

Features

- Low C_{ob} , $C_{ob}=2.0\text{pF}$ (Typ.)
- NPN Transistors

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}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	7	V
Collector current	I_C	0.15	A
Collector power dissipation	P_C	0.2	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
2SC2412	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C=50\mu A, I_E=0$	60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C=1\text{mA}, I_B=0$	50			
Emitter - base breakdown voltage	V_{EBO}	$I_E=50\mu A, I_C=0$	7			
Collector-base cut-off current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			1.2	
DC current gain	h_{FE}	$V_{CE}=6\text{V}, I_C=1\text{mA}$	120		560	
Collector output capacitance	C_{ob}	$V_{CB}=12\text{V}, I_E=0, f=1\text{MHz}$		2	3.5	pF
Transition frequency	f_T	$V_{CE}=12\text{V}, I_E=-2\text{mA}, f=100\text{MHz}$	80			MHz

hFE Classification

Type	2SC2412/K-Q	2SC2412/K-R	2SC2412/K-S
Range	120-270	180-390	270-560
Marking	BQ	BR	BS

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics

