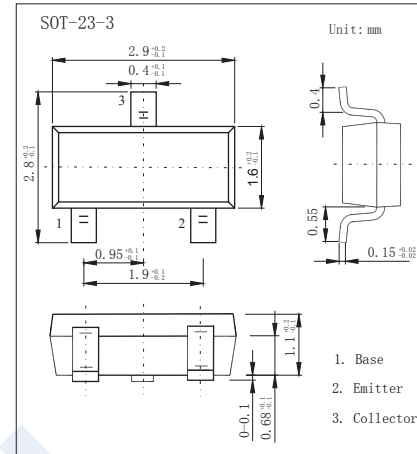


NPN Transistors

2SC2412-HF (2SC2412K-HF)

■ Features

- Low C_{ob} . $C_{ob}=2.0\text{pF}$ (Typ.)
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 50 \mu\text{A}$, $I_E = 0$	60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 \text{ mA}$, $I_B = 0$	50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 50 \mu\text{A}$, $I_C = 0$	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

■ h_{FE} Classification

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

NPN Transistors

2SC2412-HF (2SC2412K-HF)

■ Typical Characteristics

