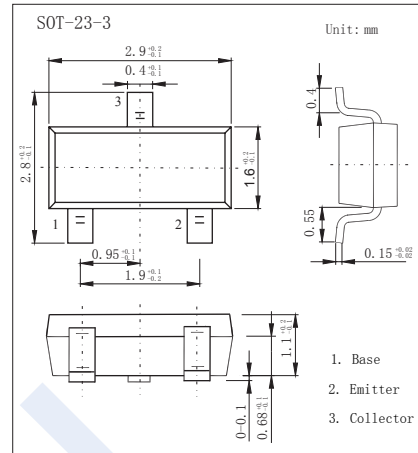


PNP Transistors

2SA1037-HF (2SA1037AK-HF)

■ Features

- Collector Current Capability $I_C=150\text{mA}$
- Collector Emitter Voltage $V_{CE0}=-50\text{V}$
- Complements the 2SC2412-HF/2SC2412AK-HF
- 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	
Emitter - Base Voltage	V_{EBO}	-6	
Collector Current - Continuous	I_C	150	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ 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}	$I_E = -50 \mu\text{A}$, $I_C = 0$	-6			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -60 \text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6\text{V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50 \text{mA}$, $I_B = -5\text{mA}$			-0.5	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}	$V_{CB} = -12\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		4	5	pF
Transition frequency	f_T	$V_{CE} = -12\text{V}$, $I_C = -2\text{mA}$, $f = 30\text{MHz}$		140		MHz

■ Classification of h_{FE}

Type	2SA1037/AK-Q-HF	2SA1037/AK-R-HF	2SA1037/AK-S-HF
Range	120-270	180-390	270-560
Marking	FQ _F	FR _F	FS _F

PNP Transistors

2SA1037-HF (2SA1037AK-HF)

■ Typical Characteristics

