

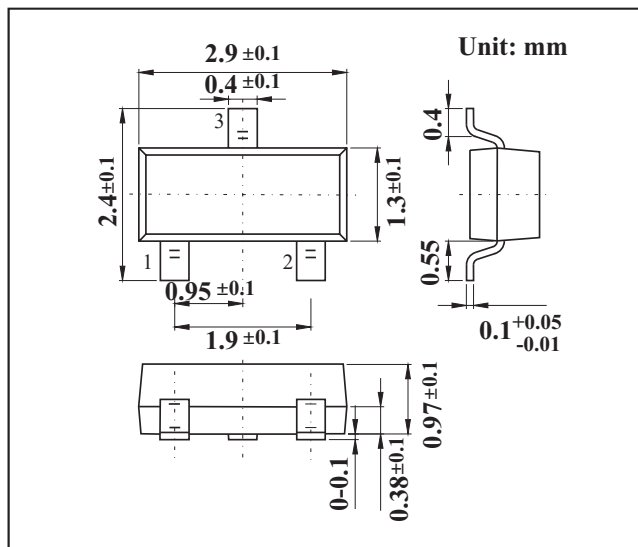
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Collector Current Capability $I_C=150\text{mA}$
- Collector Emitter Voltage $V_{CEO}=-50\text{V}$
- Compliments the 2SC2412
- PNP TRANSISTORS

MECHANICAL DATA

- Case style: SOT-23 -3molded 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	
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	°C
Storage Temperature range	T_{stg}	-55 to 150	

PACKAGE INFORMATION

Device	Package	Shipping
2SA1037	SOT-23	3000/Tape&Reel

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	uA
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	2SA1037/AK-R	2SA1037/AK-S
Range	120-270	180-390	270-560
Marking	FQ	FR	FS

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

