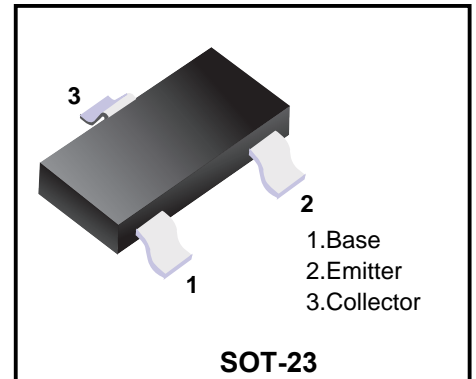


PNP Transistors

Features

- Collector Current Capability $I_c=150\text{mA}$
- Collector Emitter Voltage $V_{CE0}=-50\text{V}$
- Compliments the 2SC2412



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	

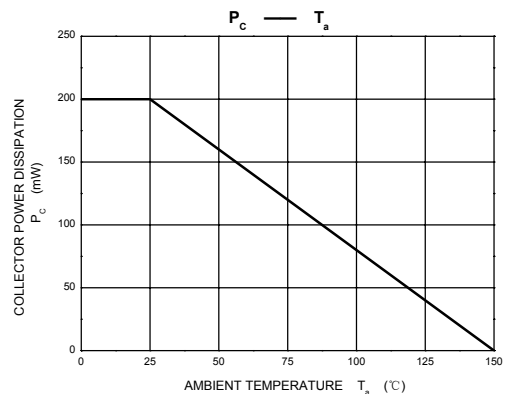
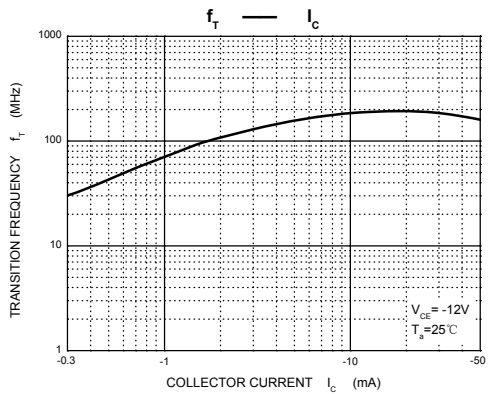
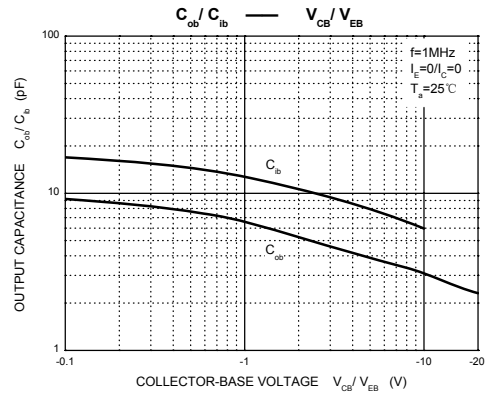
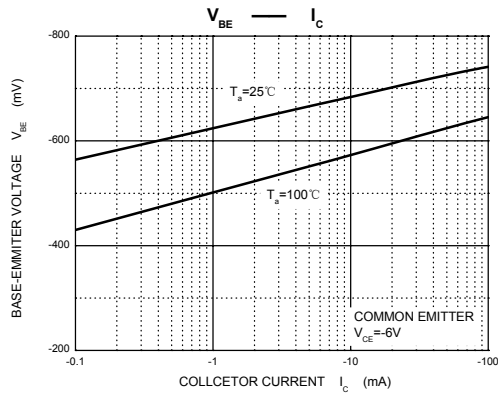
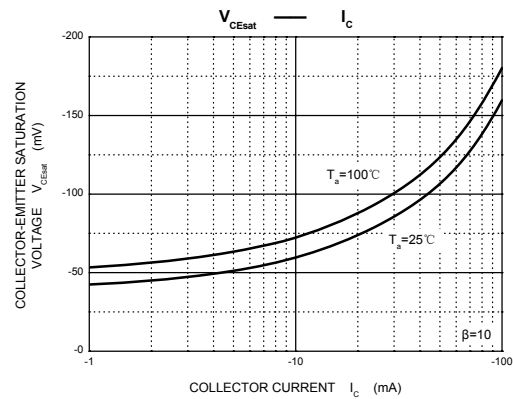
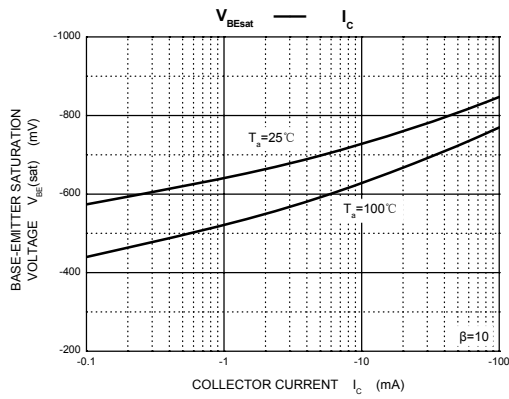
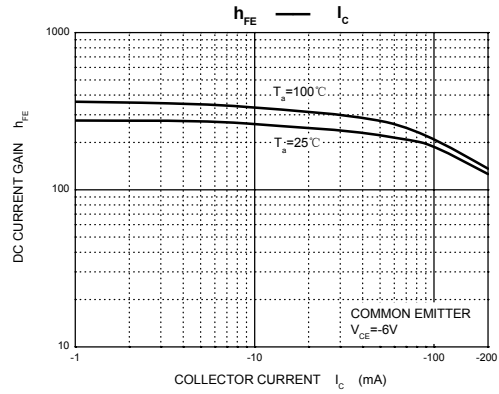
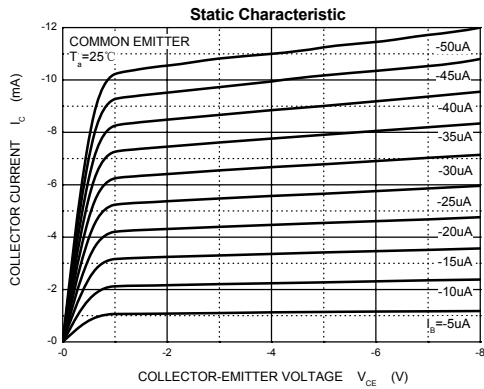
Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified.)

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

h_{FE} Classification

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

Typical Characteristics



Ordering information

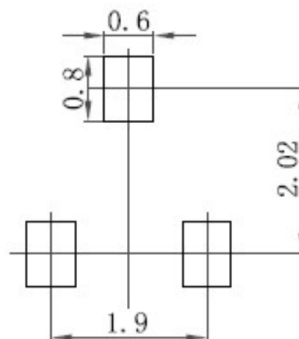
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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