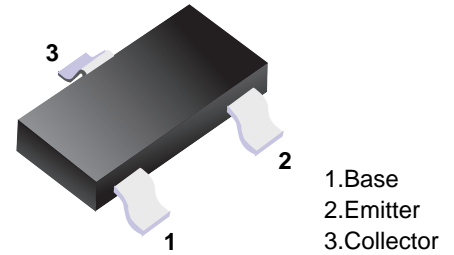


■ PNP Transistors



■ Simplified outline(SOT-23)

■ 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	

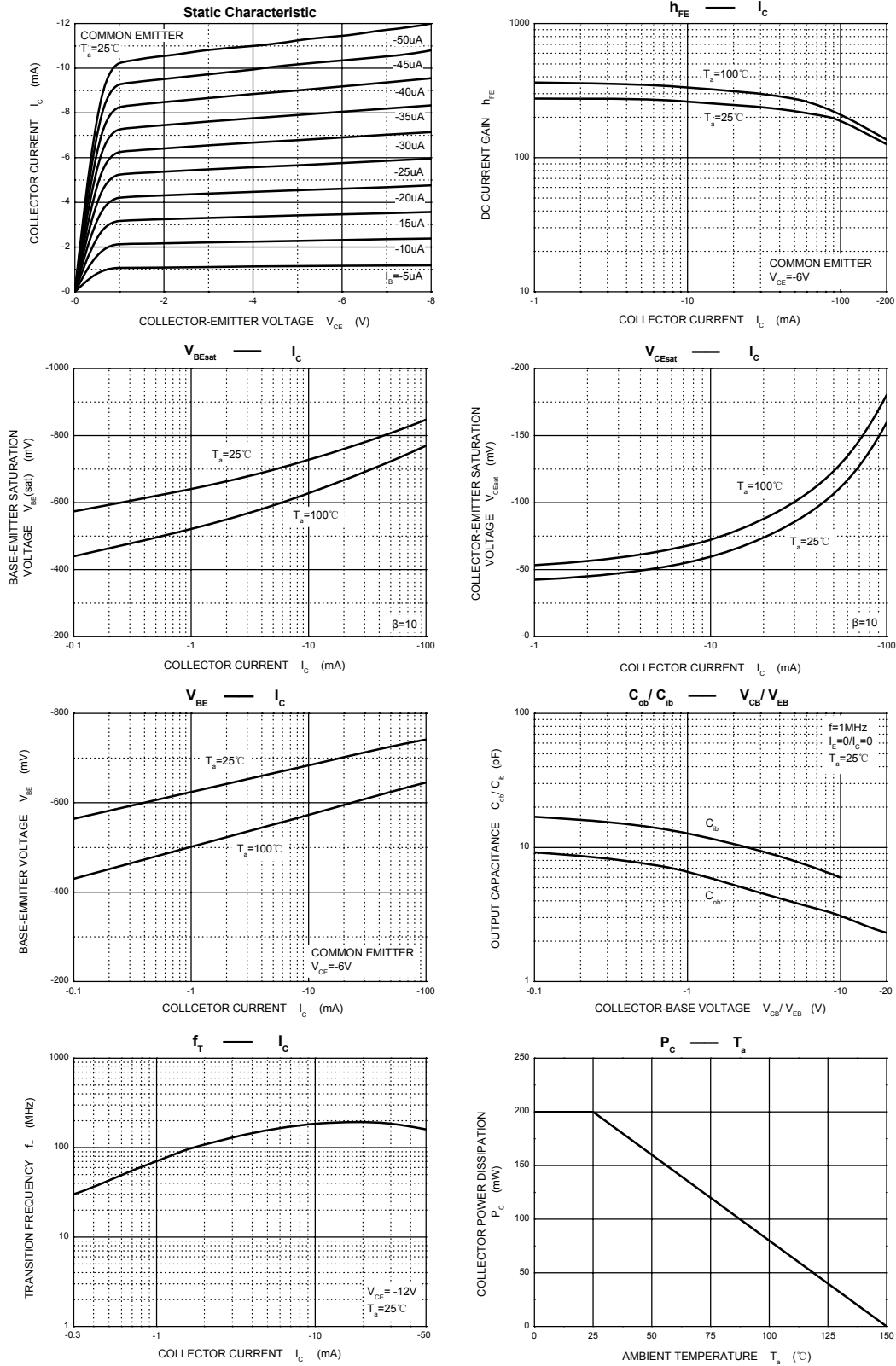
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

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}

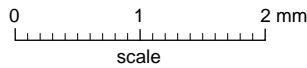
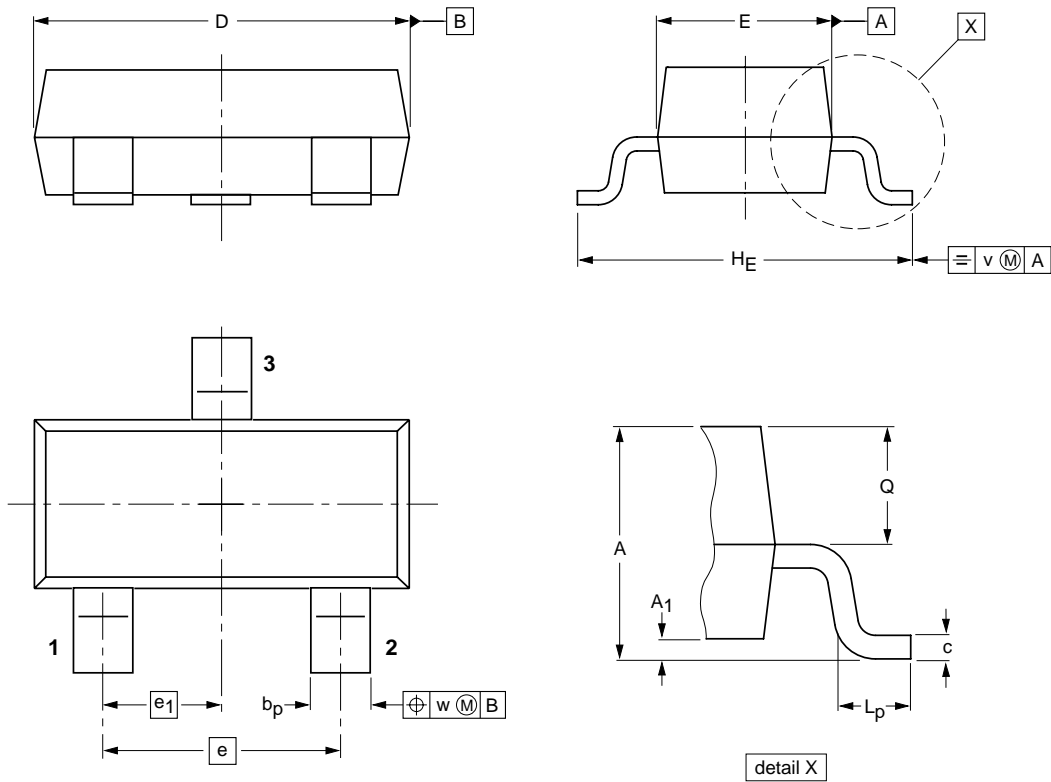
Type	2SA1037/AK-Q	2SA1037/AK-R	2SA1037/AK-S
Range	120-270	180-390	270-560
Marking	FQ	FR	FS

■ Typical Characteristics



Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1