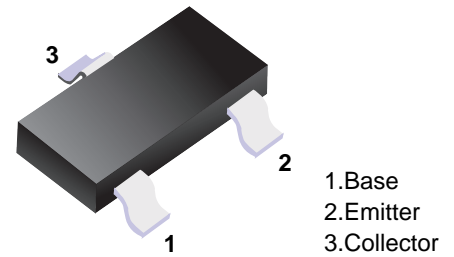


■ PNP Transistors



■ Simplified outline(SOT-23)

■ Features

- Ideally suited for automatic insertion
- Epitaxial planar die construction
- Complementary NPN type available(BC817)

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-50	V
Collector - Emitter Voltage	V_{CE0}	-45	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_c	-0.5	A
Collector Power Dissipation	P_c	0.3	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

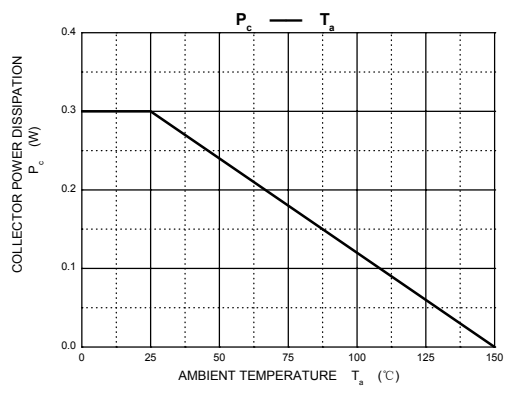
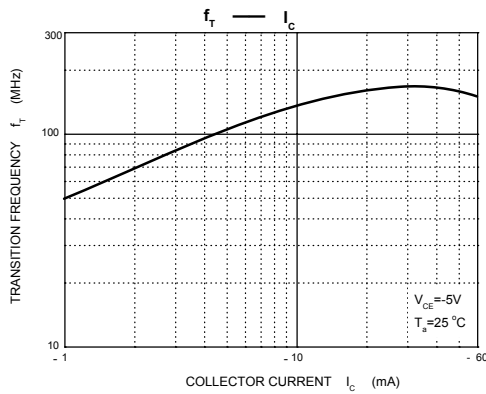
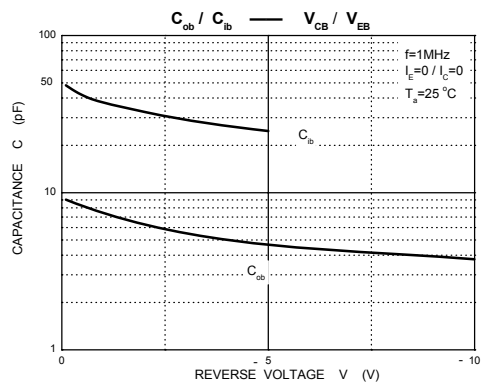
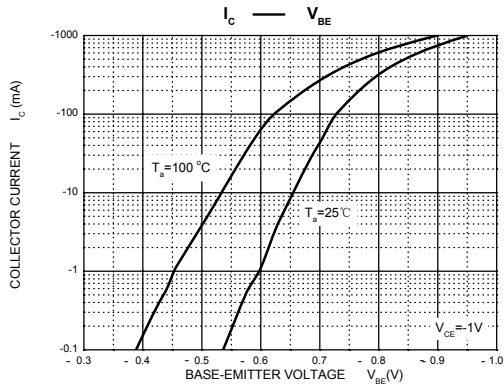
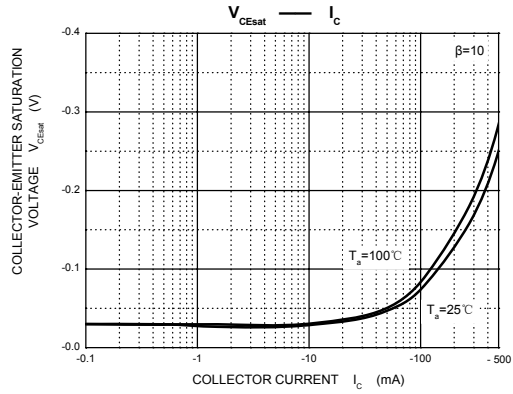
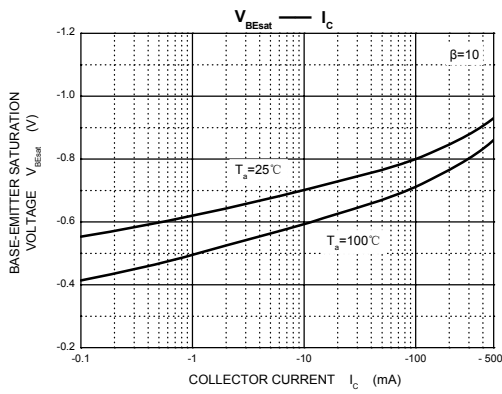
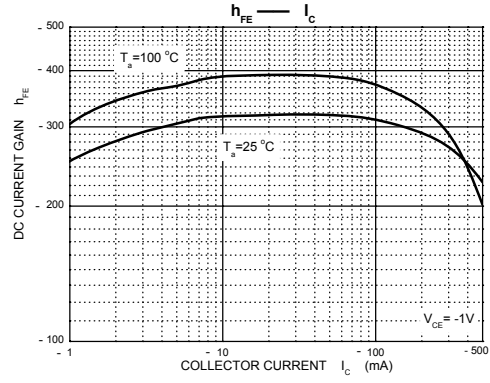
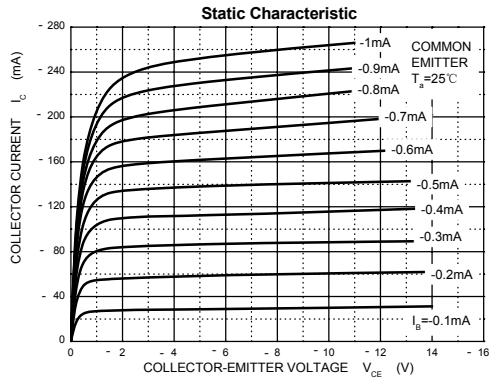
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_c = -100\mu\text{A}, I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = -10\text{ mA}, I_B = 0$	-45			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100\mu\text{A}, I_c = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -45\text{ V}, I_E = 0$			-0.1	μA
Collector- emitter cut-off current	I_{CE0}	$V_{CE} = -40\text{ V}, I_B = 0$			-0.2	
Emitter cut-off current	I_{EB0}	$V_{EB} = -4\text{ V}, I_c = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -500\text{ mA}, I_B = -50\text{ mA}$			-0.7	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -500\text{ mA}, I_B = -50\text{ mA}$			-1.2	
DC current gain	$h_{fe} (1)$	$V_{CE} = -1\text{ V}, I_c = -100\text{ mA}$	100		630	
	$h_{fe} (2)$	$V_{CE} = -1\text{ V}, I_c = -500\text{ mA}$	40			
Transition frequency	f_T	$V_{CE} = -5\text{ V}, I_c = -10\text{ mA}, f = 100\text{ MHz}$	100			MHz

■ Classification of $h_{fe}(1)$

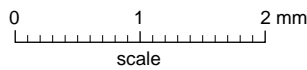
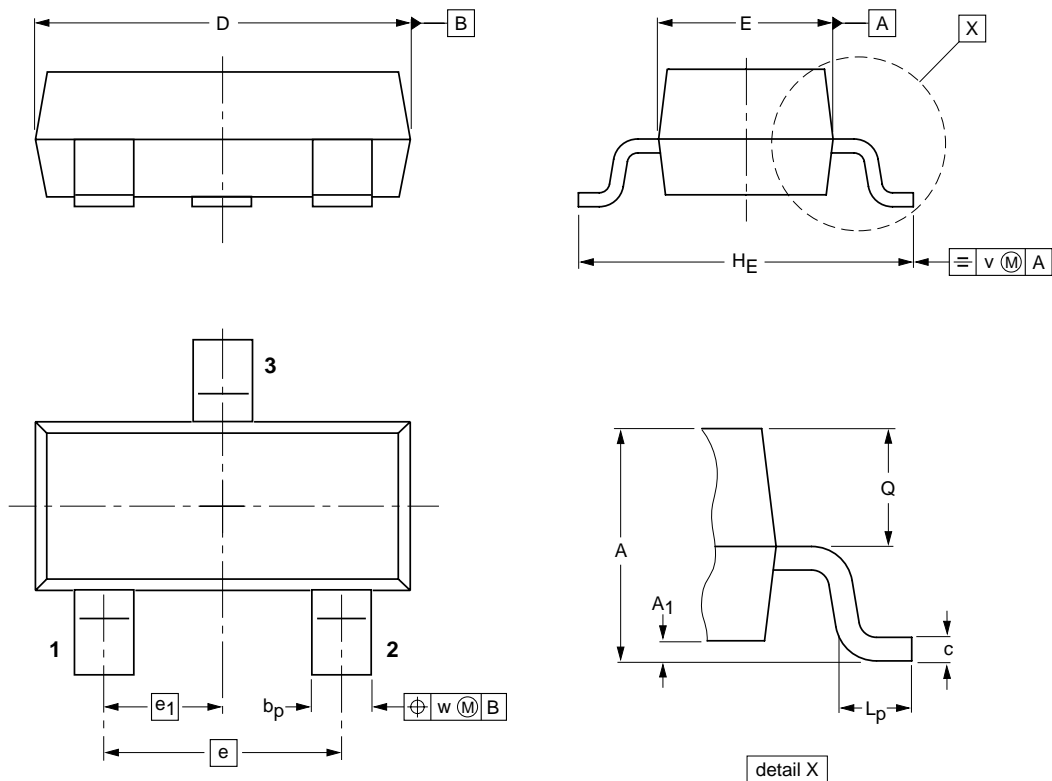
Rank	BC807-16	BC807-25	BC807-40
Range	100-250	160-400	250-630
Marking	5A	5B	5C

■ 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