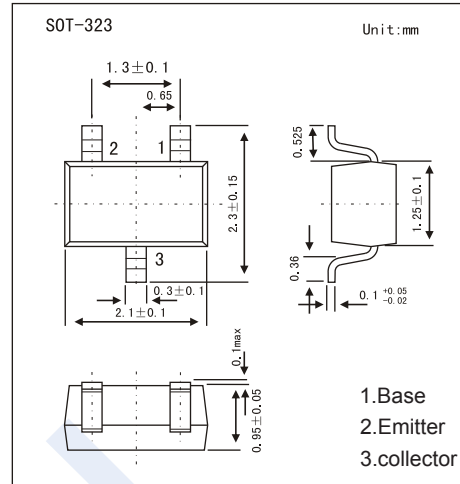


PNP Transistors

BC807W (KC807W)

■ Features

- Ideally suited for automatic insertion
- Epitaxial planar die construction
- Complementary to BC817W

■ 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	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
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}	$V_{CB} = -50 \text{V}, I_E = 0$			-0.1	μA
Collector-emitter cut-off current	I_{CE0}	$V_{CE} = -20 \text{V}, I_E = 0$			-0.2	
Emitter cut-off current	I_{EB0}	$V_{EB} = -5 \text{V}, I_c = 0$			-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		600	
	$h_{FE(2)}$	$V_{CE} = -1 \text{V}, I_c = -500 \text{mA}$	40			
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{V}, f = 1 \text{MHz}$			10	pF
Transition frequency	f_T	$V_{CE} = -5 \text{V}, I_c = -10 \text{mA}, f = 100 \text{MHz}$	80			MHz

■ Classification of $h_{FE(1)}$

Type	BC807W-16	BC807W-25	BC807W-40
Range	100-250	160-400	250-600
Marking	5A	5B	5C

PNP Transistors

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■ Typical Characteristics

