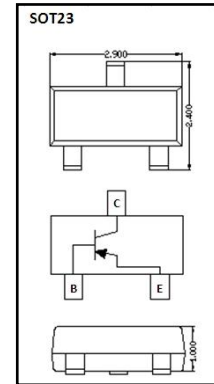


## DATA SHEET

### BC807 TRANSISTOR (PNP)

- ◇ Capable of 300mWatts of Power Dissipation and 500mA  $I_c$
- ◇ Operating and Storage Junction Temperatures:  $-55^{\circ}\text{C}$  to  $150^{\circ}\text{C}$
- ◇ Surface Mount SOT-23 Package
- ◇ RoHS compliant / Green EMC



#### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CB0}$	Collector-Base Voltage	-50	V
$V_{CE0}$	Collector-Emitter Voltage	-45	V
$V_{EB0}$	Emitter-Base Voltage	-5	V
$I_c$	Collector Current	-500	mA
$P_c$	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	417	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{STG}$	Storage Temperature	$-55 \sim +150$	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS @ $25^{\circ}\text{C}$ UNLESS OTHERWISE SPECIFIED

Symbol	Parameter	Test Conditions	Min	Max	Units
$V_{CE0}$	Collector-Emitter Breakdown Voltage	$I_c=-10\text{mA}$ , $I_B=0$	-45		V
$V_{CB0}$	Collector-Base Breakdown Voltage	$I_c=-10\mu\text{A}$ , $I_E=0$	-50		V
$V_{EB0}$	Emitter-Base Breakdown Voltage	$I_E=-10\mu\text{A}$ , $I_c=0$	-5.0		V
$I_{CB0}$	Collector Cutoff Current	$V_{CB}=-45\text{V}$ , $I_E=0\text{V}$		-100	nA
$I_{CE0}$	Collector Cutoff Current	$V_{CE}=-40\text{V}$ , $I_E=0\text{V}$		-200	nA
$I_{EB0}$	Collector Cutoff Current	$V_{EB}=-4\text{V}$ , $V_{BE}=0\text{V}$		-100	nA

$h_{FE(1)}$	DC Current Gain*	( $I_C=-100mA, V_{CE}=-1V$ ) BC807-16 BC807-25 BC807-40	100 160 250	250 400 600	
$h_{FE(2)}$	DC Current Gain*	( $I_C=-500mA, V_{CE}=-1V$ )	40		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-500mA, I_B=-50mA$		0.7	
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=-500mA, I_B=-50mA$		1.2	V
$f_T$	Current Gain-Bandwidth Product	$I_C=-10mA, V_{CE}=-5.0V, f=100MHz$	100		MHZ

CLASSIFICATION OF  $h_{fe}$

Rank	BC807-16	BC807-25	BC807-40
Range	100-250	160-400	250-600
Marking	5A	5B	5C

ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BC807	SOT23	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

PACKAGE DIMENSIONS

