

# SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

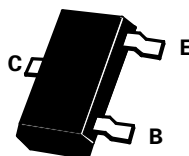
## BC807

ISSUE 3 – MARCH 2001

## PARTMARKING DETAILS

BC80716 – 5AZ  
BC80725 – 5BZ  
BC80740 – 5CZ

COMPLEMENTARY TYPE BC817



SOT23

**ABSOLUTE MAXIMUM RATINGS.**

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-45	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Peak Pulse Current	$I_{CM}$	-1	A
Continuous Collector Current	$I_C$	-500	mA
Base Current	$I_B$	-100	mA
Peak Base Current	$I_{BM}$	-200	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}C$

**ELECTRICAL CHARACTERISTICS (at  $T_{amb} = 25^{\circ}C$  unless otherwise stated).**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector Cut-Off Current	$I_{CBO}$			-0.1 -0.5	$\mu A$	$V_{CB}=-20V, I_E=0$ $V_{CB}=-20V, I_E=0, T_{amb}=150^{\circ}C$
Emitter Cut-Off Current	$I_{EBO}$			-10	$\mu A$	$V_{EB}=-5V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-700	mV	$I_C=-500mA, I_B=-50mA^*$
Base-Emitter Saturation Voltage	$V_{BE(on)}$			-1.2	V	$I_C=-500mA, V_{CE}=-1V^*$
Static Forward Current Transfer Ratio	$h_{FE}$					
	BC80716	100		250		$I_C=-100mA, V_{CE}=-1V^*$
	BC80725	160		400		$I_C=-100mA, V_{CE}=-1V^*$
	BC80740	250		600		$I_C=-100mA, V_{CE}=-1V^*$
All bands		40				$I_C=-500mA, V_{CE}=-1V^*$
Transition Frequency	$f_T$		100		MHz	$I_C=-10mA, V_{CE}=-5V$ $f=35MHz$
Output Capacitance	$C_{obo}$		8.0		pF	$V_{CB}=-10V f=1MHz$

\*Measured under pulsed conditions.

Spice parameter data is available upon request for these devices