

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

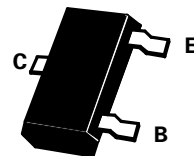
BC807

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PARTMARKING DETAILS

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

COMPLEMENTARY TYPE BC817



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CB0}	-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 $T_{amb}=25^{\circ}\text{C}$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}\text{C}$

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

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

*Measured under pulsed conditions.

Spice parameter data is available upon request for these devices