

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

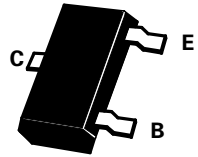
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PARTMARKING DETAILS

BC807 – 5DZ	BC808 – 5HZ
BC807-16 – 5AZ	BC808-16 – 5EZ
BC807-25 – 5BZ	BC808-25 – 5FZ
BC807-40 – 5CZ	BC808-40 – 5GZ

COMPLEMENTARY TYPES	BC807	–	BC817
	BC808	–	BC818

BC807
BC808



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	BC807	BC808	UNIT
Collector-Base Voltage	V_{CBO}	-50	-30	V
Collector-Emitter Voltage	V_{CEO}	-45	-25	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 -5	μA μA	$V_{CB}=-20V, I_E=0$ $V_{CB}=-20V, I_E=0, T_{amb}=150^{\circ}C$
Emitter Cut-Off Current	I_{EBO}			-10	μA	$V_{EB}=-5V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-700	mV	$I_C=-500mA, I_B=-50mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$			-1.2	V	$I_C=-500mA, V_{CE}=-1V^*$
Static Forward Current Transfer Ratio	h_{FE}	100 40		600		$I_C=-100mA, V_{CE}=-1V^*$ $I_C=-500mA, V_{CE}=-1V^*$
	-16	100		250		$I_C=-100mA, V_{CE}=-1V^*$
	-25	160		400		$I_C=-100mA, V_{CE}=-1V^*$
	-40	250		600		$I_C=-100mA, V_{CE}=-1V^*$
Transition Frequency	f_T		100		MHz	$I_C=-10mA, V_{CE}=-5V$ $f=35MHz$
Collector-base Capacitance	C_{obo}		8.0		pF	$I_E=I_C=0, V_{CB}=-10V$ $f=1MHz$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
Spice parameter data is available upon request for these devices