

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

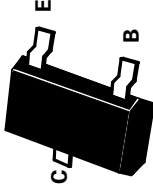
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PARTMARKING DETAILS

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	-500	mA
Base Current	I_B	-100	-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 -5	μA 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 Turn-on Voltage	$V_{BE(on)}$			-1.2	V	$I_C=-500\text{mA}, V_{CE}=-1\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	100 40		600		$I_C=-100\text{mA}, V_{CE}=-1\text{V}^*$ $I_C=-500\text{mA}, V_{CE}=-1\text{V}^*$
	-16	100		250		$I_C=-100\text{mA}, V_{CE}=-1\text{V}^*$
		160		400		$I_C=-100\text{mA}, V_{CE}=-1\text{V}^*$
		250		600		$I_C=-100\text{mA}, V_{CE}=-1\text{V}^*$
Transition Frequency	f_T		100		MHz	$I_C=-10\text{mA}, V_{CE}=-5\text{V}$ $f=35\text{MHz}$
Collector-base Capacitance	C_{obo}		8.0		pF	$I_E=I_C=0, V_{CB}=-10\text{V}$ $f=1\text{MHz}$

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