

# SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

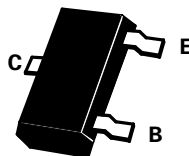
**BC807**  
**BC808**

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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



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	$\mu A$ $\mu A$	$V_{CB}=-20V, I_E=0$ $V_{CB}=-20V, I_E=0, T_{amb}=150^{\circ}C$
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 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 $\mu s$ . Duty cycle  $\leq 2\%$   
Spice parameter data is available upon request for these devices