

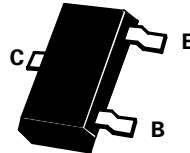
SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 4 – MARCH 2001

BCX17

PARTMARKING DETAILS – BCX17 – T1
BCX17R – T4

COMPLIMENTARY TYPES - BCX19



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V_{CES}	-50	V
Collector-Emitter Voltage ($I_C = -10\text{mA}$)	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-500	mA
Peak Collector Current	I_{CM}	-1000	mA
Peak Emitter Current	I_{EM}	-1000	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-Base Cut-Off Current	I_{CBO}			-100 -200	nA μA	$I_E = 0, V_{CB} = -20\text{V}$ $I_E = 0, V_{CB} = -20\text{V}, T_j = 150^\circ\text{C}$
Emitter-Base Cut-Off Current	I_{EBO}			-10	μA	$I_C = 0, V_{EB} = -1\text{V}$
Base-Emitter Voltage	V_{BE}			-1.2	V	$I_C = -500\text{mA}, V_{CE} = -1\text{V}^*$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-620	mV	$I_C = -500\text{mA}, I_B = -50\text{mA}^*$
Static Forward Current Transfer Ratio	h_{FE}	100 70 40		600		$I_C = -100\text{mA}, V_{CE} = -1\text{V}$ $I_C = -300\text{mA}, V_{CE} = -1\text{V}^*$ $I_C = -500\text{mA}, V_{CE} = -1\text{V}^*$
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 this device