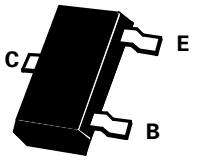
SOT23 NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

BCX19

ISSUE 4 – MARCH 2001

PARTMARKING DETAILS – BCX19 - U1
BCX19R - U4

COMPLEMENTARY TYPES - BCX17



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V_{CES}	50	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	1000	mA
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°C	P_{TOT}	330	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Cut-Off Current	I_{CBO}			100 200	nA µA	V_{CB}=20V V_{CB}=20V, T_j=150°C
Emitter-Base Cut-Off Current	I_{EBO}			10	µA	V_{EB}=5V
Base-Emitter Voltage	V_{BE}			1.2	V	I_C=500mA, V_{CE}=1V*
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			620	mV	I_C=500mA, I_B=50mA*
Static Forward Current Transfer Ratio	h_{FE}	100 70 40		600		I_C=100mA, V_{CE}=1V I_C=300mA, V_{CE}=1V* I_C=500mA, V_{CE}=1V*
Transition Frequency	f_T		200		MHz	I_C=10mA, V_{CE}=5V f=35MHz
Output Capacitance	C_{obo}		5.0		pF	V_{CB}=10V, f=1MHz

*Measured under pulsed conditions.

ZETEX