SOT89 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

BCX69

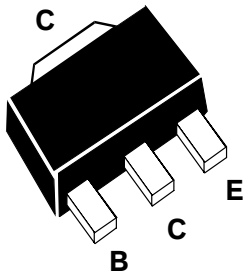
ISSUE 2 – FEBRUARY 1995 ✪

FEATURES

* High gain and low saturation voltages

COMPLEMENTARY TYPE – BCX68

PARTMARKING DETAIL – BCX69 – CJ
BCX69-16 – CG
BCX69-25 – CH



SOT89

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-25	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-2	A
Continuous Collector Current	I_C	-1	A
Power Dissipation at T_{amb}=25°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-65 to +150	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown voltage	$V_{(BR)CBO}$	-25			V	IC =-100µA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20			V	IC =-10mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	I_E =-100µA
Collector Cut-Off Current	I_{CBO}			-0.1 -10	µA µA	V_{CB} =-25V V_{CB} =-25V, T_{amb} =150°C
Emitter Cut-Off Current	I_{EBO}			-10	µA	V_{EB} =-5V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	I_C =-1A, I_B =-100mA
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			-1.0	V	I_C =-1A, V_{CE} =-1V
Static Forward Current Transfer Ratio	h_{FE} BCX69-16 BCX69-25	50 85 60 100 160	 250	 375 250 400		I_C =-5mA, V_{CE} =-1V I_C =-500mA, V_{CE} =-1V I_C =-1A, V_{CE} =-1V* I_C =-500mA, V_{CE} =-1V* I_C =-500mA, V_{CE} =-1V
Transition Frequency	f_T	100			MHz	I_C =-100mA, V_{CE} =-5V, f=100MHz
Output Capacitance	C_{obo}			25	pF	V_{CB} =-10V, f=1MHz

*Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤2%
For typical characteristics graphs see FMMT549 datasheet.