

SOT89 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 2 – FEBRUARY 1995



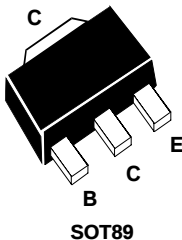
BCX69

FEATURES

- * High gain and low saturation voltages

COMPLEMENTARY TYPE – BCX68

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



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 $T_{amb}=25^{\circ}C$	P_{tot}	1	W
Operating and Storage Temperature Range	T_j, T_{stg}	-65 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown voltage	$V_{(BR)CBO}$	-25			V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20			V	$I_C = -10mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}			-0.1 -10	μA μA	$V_{CB} = -25V$ $V_{CB} = -25V, T_{amb} = 150^{\circ}C$
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}	50 85 60 100 160		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=300 μs . Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMT549 datasheet.