

SOT89 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

BCX69

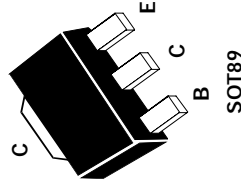
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FEATURES

- * 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_{CB0}	-25	V
Collector-Emitter Voltage	V_{CE0}	-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 $T_{amb}=25^{\circ}\text{C}$	P_{tot}	1	W
Operating and Storage Temperature Range	T_j, T_{stg}	-65 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 Breakdown voltage	$V_{(BR)CB0}$	-25			V	$I_C = -100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	-20			V	$I_C = -10\text{mA}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E = -100\mu\text{A}$
Collector Cut-Off Current	I_{CB0}			-0.1	μA	$V_{CB} = -25\text{V}$
Emitter Cut-Off Current	I_{EBO}			-10	μA	$V_{CB} = -25\text{V}, T_{amb} = 150^{\circ}\text{C}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	$V_{EB} = -5\text{V}$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			-1.0	V	$I_C = -1\text{A}, I_B = -100\text{mA}$
Static Forward Current Transfer Ratio	h_{FE}	50				$I_C = -5\text{mA}, V_{CE} = -1\text{V}$
		85		375		$I_C = -500\text{mA}, V_{CE} = -1\text{V}$
		60		250		$I_C = -1\text{A}, V_{CE} = -1\text{V}^*$
	BCX69-16	100		400		$I_C = -500\text{mA}, V_{CE} = -1\text{V}^*$
	BCX69-25	160	250			$I_C = -500\text{mA}, V_{CE} = -1\text{V}$
Transition Frequency	f_T	100			MHz	$I_C = -100\text{mA}, V_{CE} = -5\text{V}, f = 100\text{MHz}$
Output Capacitance	C_{ob0}			25	pF	$V_{CB} = -10\text{V}, f = 1\text{MHz}$

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