

SOT89 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

BC869

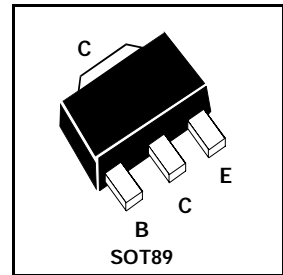
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FEATURES

- * SUITABLE FOR GENERAL AF APPLICATIONS AND CLASS B AUDIO OUTPUT STAGES UP TO 3W
- * HIGH h_{FE} AND LOW SATURATION VOLTAGE

COMPLEMENTARY TYPE - BC868 (NPN)

PARTMARKING DETAILS - BC869 - CEC
BC869-16 - CHC
BC869-25 - CJC



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	$I_E = -10\mu A$
Collector Cut-Off Current	I_{CBO}			-10 -1	μA mA	$V_{CB} = -25V$ $V_{CE} = -25V, T_{amb} = 150^{\circ}C$
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		375 250 375		$I_C = -5mA, V_{CE} = -10V^*$ $I_C = -500mA, V_{CE} = -1V^*$ $I_C = -1A, V_{CE} = -1V^*$ $I_C = -500mA, V_{CE} = -1V^*$ $I_C = -500mA, V_{CE} = -1V^*$
Transition Frequency	f_T		60		MHz	$I_C = -10mA, V_{CE} = -5V$ $f = 35MHz$
Output Capacitance	C_{obo}		45		pF	$V_{CB} = -10V, f = 1MHz$

*Measured under pulsed conditions. Pulse width=300us. Duty cycle $\leq 2\%$
For typical characteristics graphs see FM549 datasheet