SOT89 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

BC869

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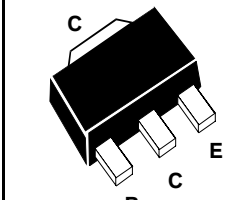
FEATURES

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



SOT89

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°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	I_C=-100µA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20			V	I_C=-10mA*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	I_E=-10µA
Collector Cut-Off Current	I_{CBO}			-10 -1	µA mA	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} BC869-16 BC869-25	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=300µs. Duty cycle ≤2%
For typical characteristics graphs see FMMT549 datasheet