SOT223 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

BCP69

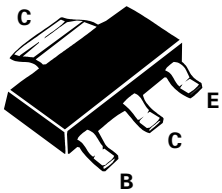
ISSUE 3 – FEBRUARY 1996 ✪

FEATURES

* For AF drivers and output stages
* High collector current and Low $V_{CE(sat)}$

COMPLEMENTARY TYPE – BCP68

PARTMARKING DETAIL – BCP69
BCP69 – 25



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}	2	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 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=-10μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20			V	I_C=- 30mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	I_E=-10μA
Collector Cut-Off Current	I_{CBO}			-100 -10	nA 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	$V_{BE(on)}$		- 0.6	 -1.0	V V	I_C=-5A, V_{CE}=-10V* I_C=-1A, V_{CE}=-1V*
Static Forward Current Transfer Ratio	h_{FE} BCP69 BCP69-25	50 63 160	 250	 400 400		I_C=-5mA, V_{CE}=-10V* 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

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