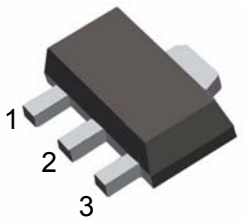
TRANSISTOR (PNP)

SOT-89

1. BASE
2. COLLECTOR
3. EMITTER



FEATURES

- For general AF applications
- High collector current
- High current gain
- Low collector-emitter saturation voltage
- Complementary type: BCX68 (NPN)

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-25	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1	A
P_C	Collector Dissipation	0.8	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

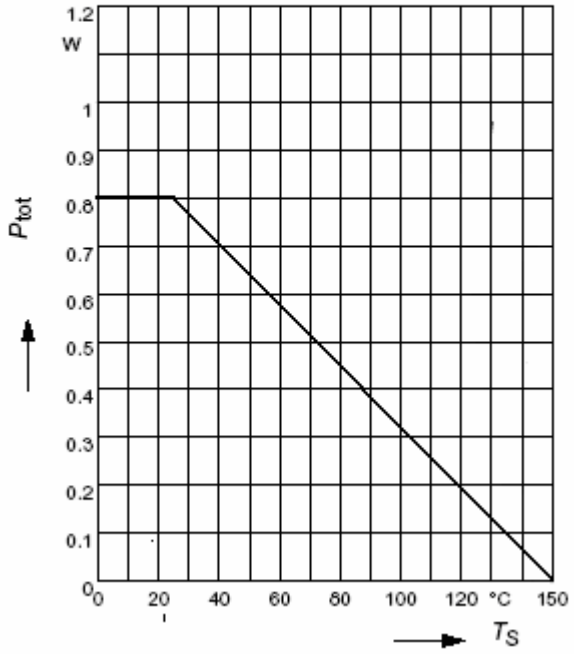
Parameter		Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage		$V_{(BR)CBO}$	I_C=-10μA , I_E=0	-25			V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	I_C=-30mA , I_B=0	-20			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=-1μA, I_C=0	-5			V
Collector cut-off current		I_{CBO}	V_{CB}=-25V, I_E=0			-0.1	μA
Emitter cut-off current		I_{EBO}	V_{EB}=-5V, I_C=0			-0.1	μA
DC current gain	**BCX69** **BCX69-10** **BCX69-16** **BCX69-25**	$h_{FE\ (1)}$ [1]	V_{CE}=-1V, I_C=-500mA	85 85 100 160		375 160 250 375	
		$h_{FE(2)}$ [1]	V_{CE}=-10V, I_C=-5mA	50			
		$h_{FE(3)}$ [1]	V_{CE}=-1V, I_C=-1A	60			
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=-1A, I_B=-100mA			-0.5	V
Base-emitter voltage		$V_{BE(ON)}$ [1]	I_C=-5mA, V_{CE}=-10V I_C=-1A, V_{CE}=-1V		-0.6	 -1	V
Transition frequency		f_T	V_{CE}=-5V, I_C=-100mA f=20MHz		100		MHz

[1] Pulse test: t ≤=300μs, D = 2%

MARKING: BCX69=CE1 BCX69-10=CF1 BCX69-16=CG1 BCX69-25=CH1

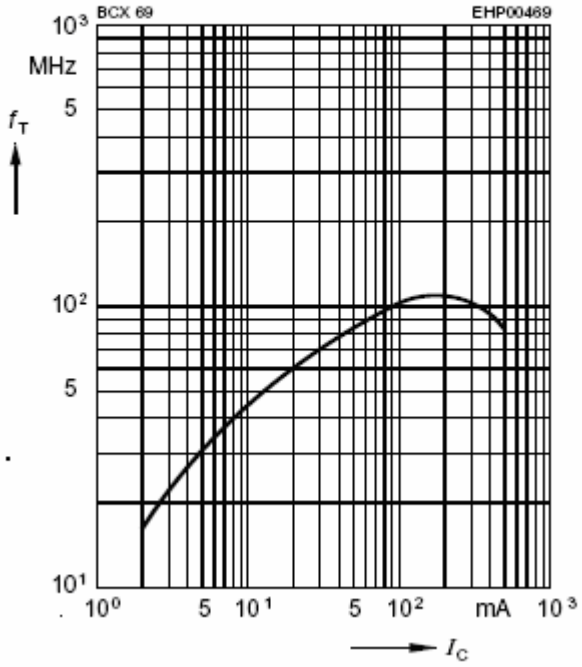
Typical Characteristics

Total power dissipation $P_{tot} = f(T_S)$



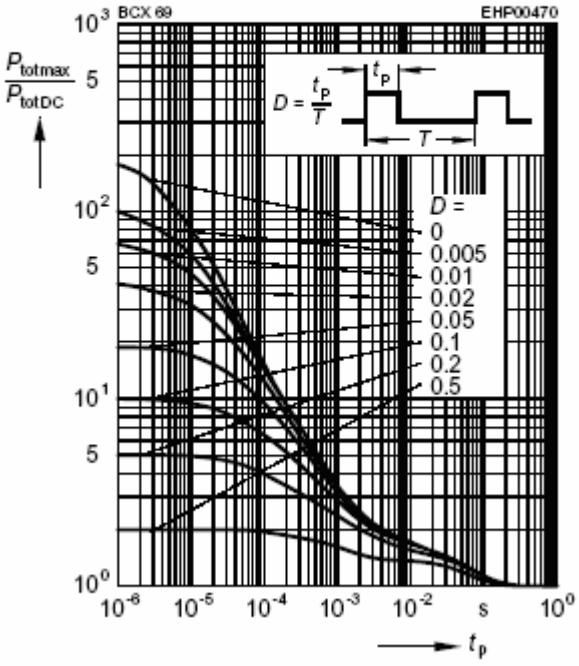
Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$



Permissible pulse load

$P_{totmax} / P_{totDC} = f(t_p)$



Collector cutoff current $I_{CBO} = f(T_A)$

$V_{CB} = 25V$