

1. BASE
2. COLLECTOR
3. EMITTER

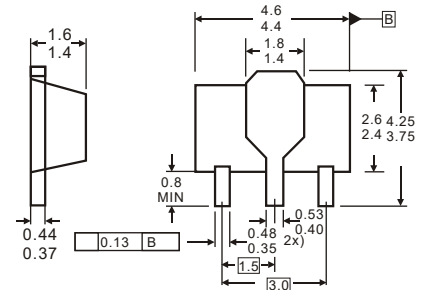
Features

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

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CB0}	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	°C
T _{stg}	Storage Temperature	-65-150	°C

SOT-89



Dimensions in inches and (millimeters)

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

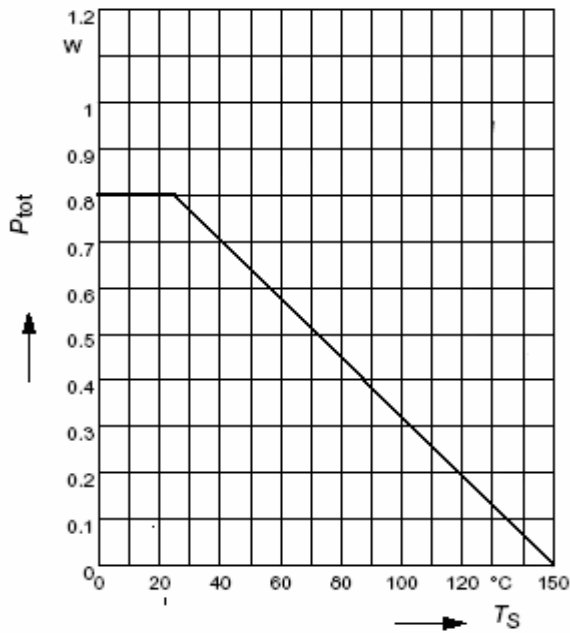
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0	-25			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-30mA, I _B =0	-20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-1μA, I _C =0	-5			V
Collector cut-off current	I _{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⁾		85	375	
		h _{FE(2)} ¹⁾	V _{CE} =-1V, I _C =-500mA	85	160	
		h _{FE(3)} ¹⁾	V _{CE} =-10V, I _C =-5mA	100	250	
			160	375		
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		-0.6		V
		I _C =-1A, V _{CE} =-1V			-1	
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

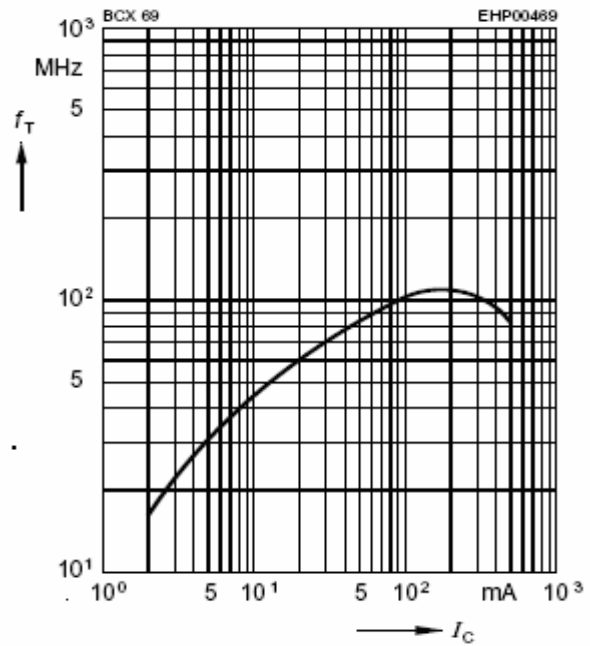
Typical Characteristics

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



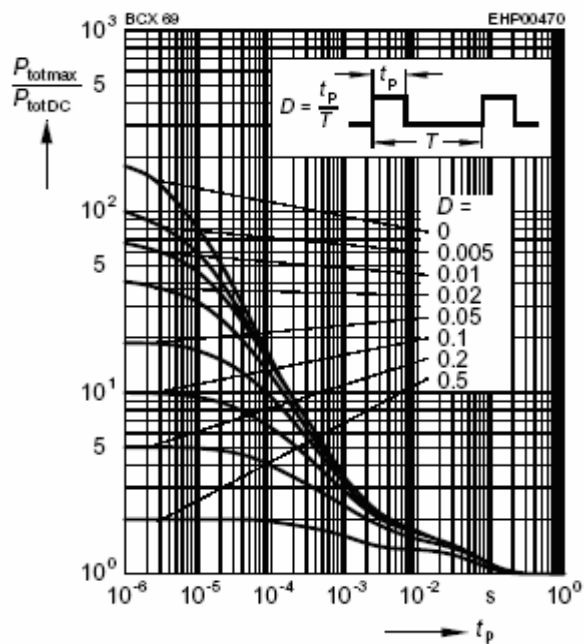
Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$



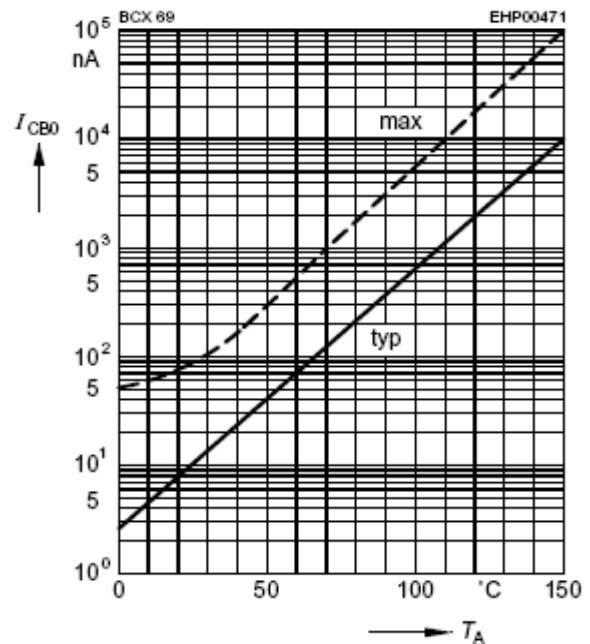
Permissible pulse load

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



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

$V_{CB} = 25V$



Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT -89	1000pcs	7inch	10,000pcs	203×203×195	40,000pcs	438×438×220