

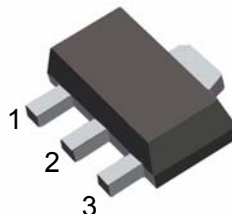
TRANSISTOR (PNP)

FEATURES

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

SOT-89

1. BASE
2. COLLECTOR
3. EMITTER



MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

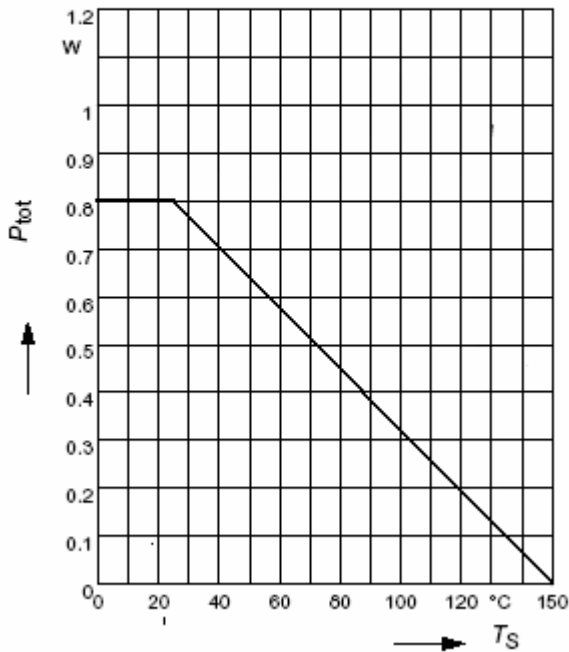
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}$, $I_E=0$	-25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-30\text{mA}$, $I_B=0$	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1\mu\text{A}$, $I_C=0$	-5			V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

¹⁾ Pulse test: $t \leq 300\mu\text{s}$, $D = 2\%$

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

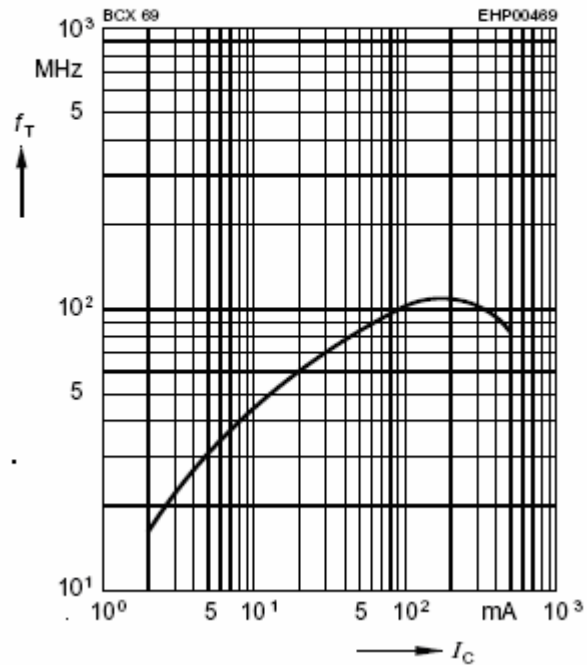
Typical Characteristics

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



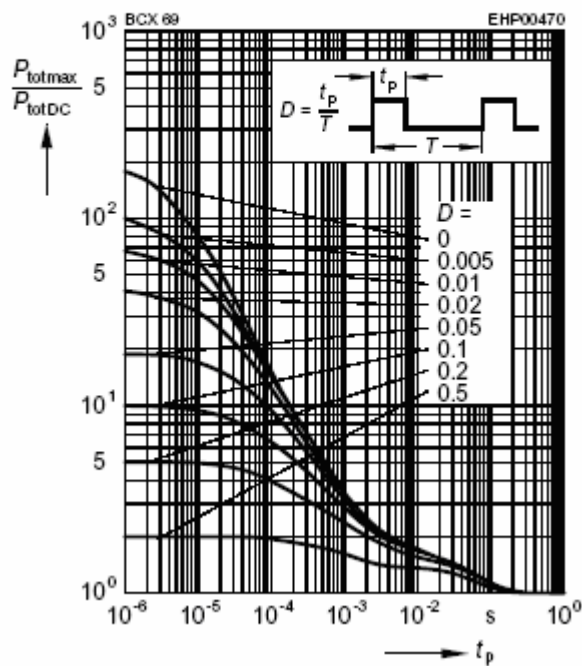
Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$



Permissible pulse load

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



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

$V_{CB} = 25V$

