BCX69 TRANSISTOR (PNP)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-89

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	Unit
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,T_{stg}	Operation Junction and Storage Temperature Range	-55~150	℃

ELECTRICAL CHARACTERISTICS (T_a=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**	$h_{FE\ (1)}$ [1)]	V_{CE}=-1V, I_C=-500mA	85		375	
	BCX69-10			85		160	
	BCX69-16			100		250	
	BCX69-25			160		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		-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