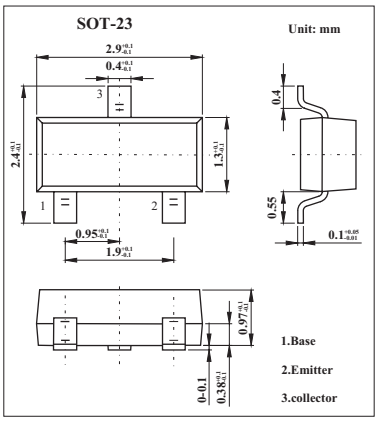
PNP General Purpose Transistors

BCX17,BCX18



■ Features

- Low current (max. 100 mA).
- Low voltage (max. 32 V).

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	BCX17	BCX18	Unit
Collector-base voltage	V_{CBO}	-50	-30	V
Collector-emitter voltage	V_{CEO}	-45	-25	V
Emitter-base voltage	V_{EBO}	-5		V
Collector current	I_C	-500		mA
Peak collector current	I_{CM}	-1000		mA
Peak base current	I_{BM}	-200		mA
Total power dissipation *	P_{tot}	250		mW
Storage temperature	T_{stg}	-65 to +150		℃
Junction temperature	T_j	150		℃
Operating ambient temperature	R_{amb}	-65 to +150		℃
Thermal resistance from junction to ambient *	$R_{th\ j\text{-}a}$	500		K/W

* Transistor mounted on an FR4 printed-circuit board.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	I_E = 0; V_{CB} = -20 V			-100	nA
	I_{CBO}	I_E = 0; V_{CB} = -20 V; T_j = 100 ℃			-5	μA
Emitter cutoff current	I_{EBO}	I_C = 0; V_{EB} = -5 V			-100	nA
DC current gain	h_{FE}	I_C = -100 mA; V_{CE} = -1 V	100		600	
		I_C = -300 mA; V_{CE} = -1 V	70			
		I_C = -500 mA; V_{CE} = -1 V	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -500 mA; I_B = -50 mA			-620	mV
Base to emitter voltage	V_{BE}	I_C = -500 mA; V_{CE} = -1 V			-1.2	V
Collector capacitance	C_C	I_E = ie = 0; V_{CB} = -10 V; f = 1 MHz		9		pF
Transition frequency	f_T	I_C = -10 mA; V_{CE} = -5 V; f = 100 MHz	80			MHz

■ h_{FE} Classification

TYPE	BCX17	BCX18
Marking	T1	T2