

BCX70G

NPN EPITAXIAL SILICON TRANSISTOR

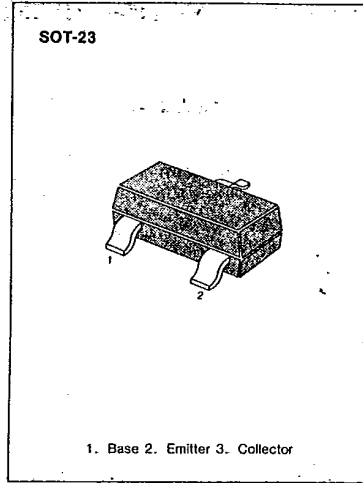
T-29-19

GENERAL PURPOSE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	45	V
Collector-Emitter Voltage	V _{CE0}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	200	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{stg}	150	°C

• Refer to MMBT5088 for graphs



ELECTRICAL CHARACTERISTICS (T_a = 25°C)

Characteristic	Symbol	Test Condition	Min.	Max.	Unit
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = 2mA, I _B = 0	45		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = 1μA, I _C = 0	5		V
Collector Cutoff Current	I _{CES}	V _{CE} = 32V, V _{BE} = 0		20	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 4V, I _C = 0		20	nA
DC Current Gain	h _{FE}	V _{CE} = 5V, I _C = 2mA	120	220	
		V _{CE} = 1V, I _C = 50mA	60		
Collector-Emitter Saturation Voltage	V _{CE} (sat)	I _C = 10mA, I _B = 0.25mA		0.35	V
		I _C = 50mA, I _B = 1.25mA		0.55	V
Base-Emitter Saturation Voltage	V _{BE} (sat)	I _C = 50mA, I _B = 0.25mA	0.6	0.85	V
		I _C = 50mA, I _B = 1.25mA	0.7	1.05	V
Base-Emitter On Voltage	V _{BE} (on)	I _C = 2mA, V _{CE} = 5V	0.55	0.75	V
Current Gain-Bandwidth Product	f _T	V _{CE} = 5V, I _C = 10mA	125		MHz
		f = 100MHz			
Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0		4.5	pF
		f = 1MHz			
Noise Figure	NF	I _C = 0.2mA, V _{CE} = 5V		6	dB
		f = 1KHz, R _S = 2KΩ			
Turn On Time	t _{on}	I _C = 10mA, I _{B1} = 1mA		150	ns
Turn Off Time	t _{off}	I _{B2} = 1mA, V _{BB} = 3.6V		800	ns
		R _L = 990Ω, R ₁ = R ₂ = 5KΩ			

Marking

