BCX71G PNP EPITAXIAL SILICON TRANSISTOR

T-29-19

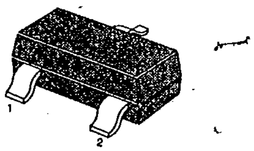
GENERAL PURPOSE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	45	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	100	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	Tstg	150	°C

- Refer to MMBT5086 for graphs

SOT-23



1. Base 2. Emitter 3. Collector

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 Saturation Voltage	BV_{EBO}	I_E=1μA, I_C=0	5		V
Collector Cutoff Current	I_{CES}	V_{CE}=32V, V_{BE}=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		0.25	V
		I_C=50mA, I_B=1.25mA		0.55	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C=10mA, I_B=0.25mA	0.6	0.85	V
		I_C=50mA, I_B=1.25mA	0.68	1.05	V
Base-Emitter On Voltage	V_{BE} (on)	I_C=2mA, V_{CF}=5V	0.6	0.75	V
Output Capacitance	Cob	V_{CB}=10V, I_E=0 f=1MHz		6	pF
Noise Figure	NF	I_C=0.2mA, V_{CE}=5V R_S=2KΩ, f=1KHz		6	dB
Turn On Time	ton	I_C=10mA, I_{B1}=1mA		150	ns
Turn Off Time	toff	I_{B2}=1mA, V_{BB}=3.6V R_L=990Ω		800	ns

Marking