

BCX70G

NPN EPITAXIAL SILICON TRANSISTOR

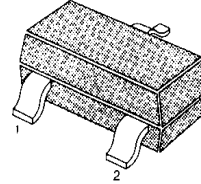
GENERAL PURPOSE TRANSISTOR

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	V
Collector Current	I _C	200	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{STG}	150	°C

• Refer to KS5088 for graphs

SOT-23

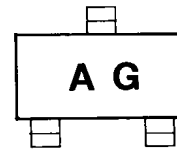


1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	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 Cut-off Current	I _{CES}	V _{CE} =32V, V _{BE} =0		20	nA
Emitter Cut-off 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 =10mA, 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
Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0 f=1MHz		4.5	pF
Noise Figure	NF	I _C =0.2mA, V _{CE} =5V f=1KHz, R _S =2KΩ		6	dB
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 R _L =990Ω R ₁ =R ₂ =5KΩ		800	ns

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