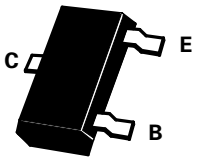
SOT23 PNP PLANAR SMALL SIGNAL TRANSISTORS

ISSUE 2 – FEBRUARY 1995

BCW69 BCW70

PARTMARKING DETAILS – BCW69 – H1
BCW70 – H2
BCW69R – H4
BCW70R – H5



SOT23

ABSOLUTE MAXIMUM RATINGS.

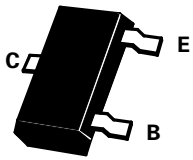
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Collector-Emitter Voltage (I_C=2mA)	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-200	mA
Continuous Collector Current	I_C	-100	A
Power Dissipation at T_{amb}=25°C	P_{tot}	330	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

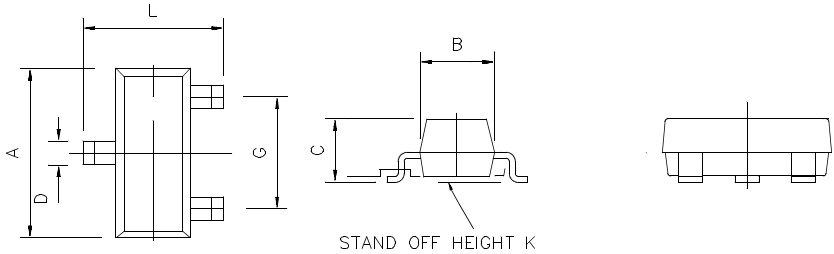
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Cut-Off Current	I_{CBO}			-100 -10	nA μA	I_E=0, V_{CB}=-20V I_E=0, V_{CB}=-20V,T_j=100°C
Base-Emitter Voltage	V_{BE}	-600		-750	mV	I_C=-2.0mA, V_{CE}=-5V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-80 -150	-300	mV mV	I_C=-10mA, I_B=-0.5mA I_C=-50mA, I_B=-2.5mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-720 -810		mV mV	I_C=-10mA, I_B=-0.5mA I_C=-50mA, I_B=-2.5mA
Static Forward Current Transfer Ratio BCW69	h_{FE}	120	90	260		I_C =-10μA, V_{CE} =-5V I_C =-2mA, V_{CE} =-5V
Static Forward Current Transfer Ratio BCW70	h_{FE}	215	150	500		I_C =-10μA, V_{CE} =-5V I_C =-2mA, V_{CE} =-5V
Transition Frequency	f_T		150		MHz	I_C =-10mA, V_{CE} =-5V f =35MHz
Collector Capacitance	C_{TC}			7	pF	I_E =I_e =0, V_{CB} =-10V f =1MHz
Noise Figure	N			10	dB	I_C =-200μA, V_{CE} =-5V R_S =2KΩ, f =1KHz B =200Hz

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%

BCW69
BCW70



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	2.67	3.05	0.105	0.120
B	1.20	1.40	0.047	0.055
C	–	1.10	–	0.043
D	0.37	0.53	0.0145	0.021
F	0.085	0.15	0.0033	0.0059
G	NOM 1.9		NOM 0.075	
K	0.01	0.10	0.0004	0.004
L	2.10	2.50	0.0825	0.0985
N	NOM 0.95		NOM 0.37	



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