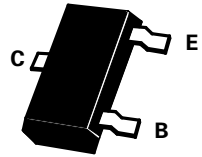


SOT23 PNP PLANAR SMALL SIGNAL TRANSISTORS

ISSUE 2 – FEBRUARY 1995

BCW69
BCW70

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



SOT23

ABSOLUTE MAXIMUM RATINGS.

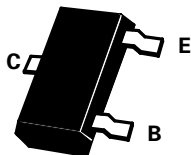
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Collector-Emitter Voltage ($I_C=2mA$)	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-200	mA
Continuous Collector Current	I_C	-100	A
Power Dissipation at $T_{amb}=25^{\circ}C$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

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

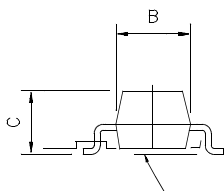
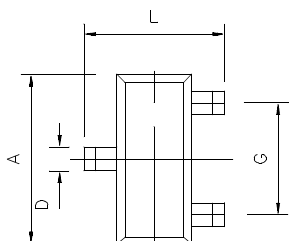
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Cut-Off Current	I_{CBO}			-100 -10	nA μA	$I_E=0, V_{CB}=-20V$ $I_E=0, V_{CB}=-20V, T_j=100^{\circ}C$
Base-Emitter Voltage	V_{BE}	-600		-750	mV	$I_C=-2.0mA, V_{CE}=-5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-80 -150	-300	mV 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	h_{FE}	120	90	260		$I_C=-10\mu A, V_{CE}=-5V$ $I_C=-2mA, V_{CE}=-5V$
		215	150	500		$I_C=-10\mu A, V_{CE}=-5V$ $I_C=-2mA, V_{CE}=-5V$
Transition Frequency	f_T		150		MHz	$I_C=-10mA, V_{CE}=-5V$ $f=35MHz$
Collector Capacitance	C_{TC}			7	pF	$I_E=I_B=0, V_{CB}=-10V$ $f=1MHz$
Noise Figure	N			10	dB	$I_C=-200\mu A, V_{CE}=-5V$ $R_S=2K\Omega, f=1KHz$ B =200Hz

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

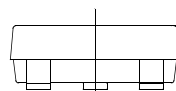
BCW69 BCW70



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	



STAND OFF HEIGHT K



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