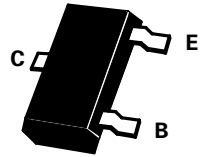


SOT23 PNP PLANAR SMALL SIGNAL TRANSISTORS

ISSUE 2 – FEBRUARY 1995

BCW69
BCW70

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



SOT23

ABSOLUTE MAXIMUM RATINGS.

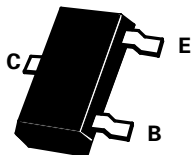
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Collector-Emitter Voltage ($I_C=2mA$)	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-200	mA
Continuous Collector Current	I_C	-100	A
Power Dissipation at $T_{amb}=25^{\circ}C$	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).

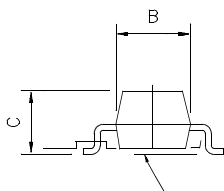
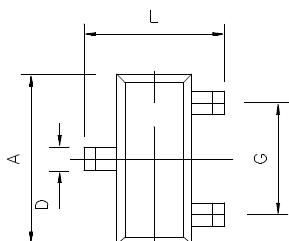
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Cut-Off Current	I_{CBO}			-100 -10	nA μA	$I_E=0, V_{CB}=-20V$ $I_E=0, V_{CB}=-20V, T_j=100^{\circ}C$
Base-Emitter Voltage	V_{BE}	-600		-750	mV	$I_C=-2.0mA, V_{CE}=-5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-80 -150	-300	mV 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 $\leq 2\%$

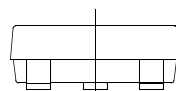
BCW69 BCW70



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



Zetex plc.
Fields New Road, Chadderton, Oldham, OL9-8NP, United Kingdom.
Telephone: (44)161-627 5105 (Sales), (44)161-627 4963 (General Enquiries)
Facsimile: (44)161-627 5467

Zetex GmbH
Streitfeldstraße 19
D-81673 München
Telefon: (49) 89 45 49 49 0
Fax: (49) 89 45 49 49 49

Zetex Inc.
87 Modular Avenue
Commack NY11725
Telephone: (516) 543-7100
Fax: (516) 864-7630

Zetex (Asia) Ltd.
3510 Metroplaza, Tower 2
Hing Fong Road, Kwai Fong
Telephone: (852) 26100 611
Fax: (852) 24250 494

These are supported by
agents and distributors in
major countries world-wide
© Zetex plc 1995

This publication is issued to provide outline information only which (unless agreed by the Company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or be regarded as a representation relating to the products or services concerned. The Company reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Diodes Incorporated:](#)

[BCW69TA](#) [BCW69TC](#) [BCW70RTA](#) [BCW70RTC](#) [BCW70TA](#) [BCW70TC](#)