

BAS16

SOT23 PNP SILICON HIGH SPEED SWITCHING DIODE

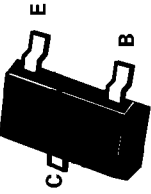
ISSUE 3 – FEBRUARY 1996

BAS16

PIN CONFIGURATION



PARTMARKING DETAILS BAS16 – A6



SOT23

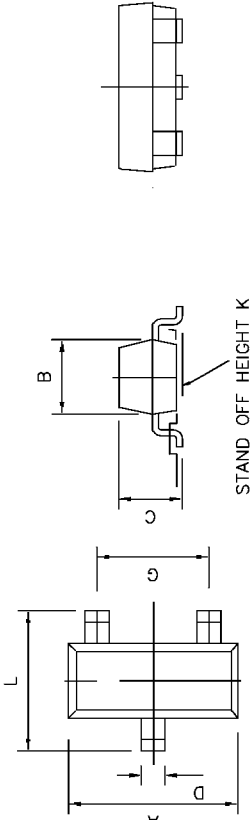
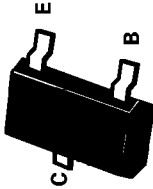
ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetative Reverse Voltage	V_{RRM}	85	V
Repetative Peak Forward Current	I_{FRM}	250	mA
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.
Forward Voltage	V_F			715 855 1000 1250		$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse Current	I_R			30 1 50	nA mA	$V_R=25V, T_j=150^{\circ}C$ $V_R=75V$ $V_R=75V, T_j=150^{\circ}C$
Forward Recovery Voltage	V_{FR}			1.75		Switched to $I_F=10mA, t_r=20ns$
Diode Capacitance	C_d			2	pF	$f=1MHz, V_R=0$
Reverse Recovery Time	t_{rr}			6	ns	$I_F=10mA, I_{RM}=10mA$ $R_L=100\Omega, I_{rr}=1mA$

- (1) Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
(2) At zero life time, measured under pulse conditions to avoid excessive dissipation and voltage limited to 275V



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
Scheffeldstraße 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.

BAS16

SOT23 PNP SILICON HIGH SPEED SWITCHING DIODE

ISSUE 3 – FEBRUARY 1996

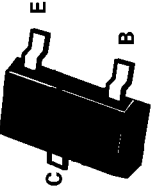
BAS16

PIN CONFIGURATION



PARTMARKING DETAILS

BAS16 – A6



SOT23

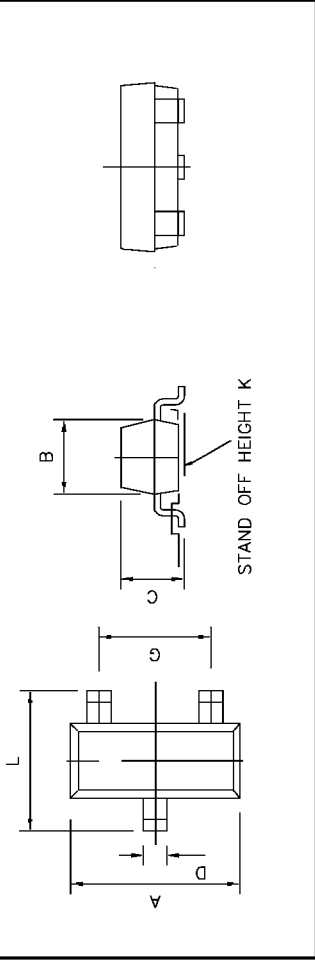
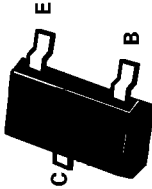
ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetative Reverse Voltage	V_{RRM}	85	V
Repetative Peak Forward Current	I_{FRM}	250	mA
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.
Forward Voltage	V_F			715 855 1000 1250		$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse Current	I_R			30 1 50	nA mA	$V_R=25V, T_j=150^{\circ}C$ $V_R=75V$ $V_R=75V, T_j=150^{\circ}C$
Forward Recovery Voltage	V_{FR}			1.75		Switched to $I_F=10mA, t_r=20ns$
Diode Capacitance	C_d			2	pF	$f=1MHz, V_R=0$
Reverse Recovery Time	t_{rr}			6	ns	$I_F=10mA, I_{RM}=10mA$ $R_L=100\Omega, I_{rr}=1mA$

- (1) Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
- (2) At zero life time, measured under pulse conditions to avoid excessive dissipation and voltage limited to 275V



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	



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
Scheffeldstraße 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.