

SOT23 PNP SILICON HIGH SPEED SWITCHING DIODE

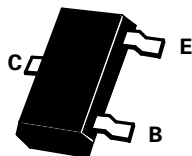
ISSUE 3 – FEBRUARY 1996

BAS16

PIN CONFIGURATION



PARTMARKING DETAILS
BAS16 – A6



SOT23

ABSOLUTE MAXIMUM RATINGS.

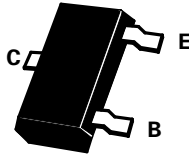
PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetative Reverse Voltage	V_{RRM}	85	V
Repetative Peak Forward Current	I_{FRM}	250	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j:T_{stg}$	-55 to +150	$^\circ\text{C}$

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

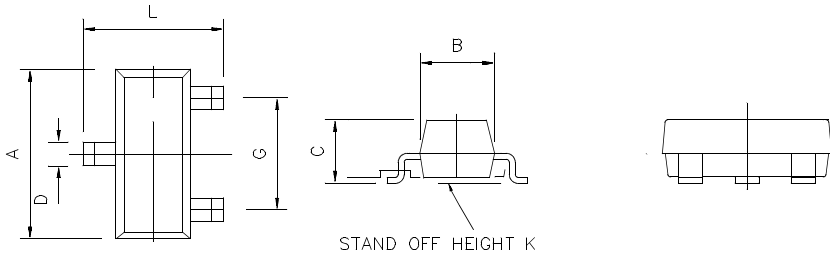
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Forward Voltage	V_F			715 855 1000 1250		$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$
Reverse Current	I_R			30 1 50	nA mA	$V_R=25\text{V}$, $T_j=150^\circ\text{C}$ $V_R=75\text{V}$ $V_R=75\text{V}$, $T_j=150^\circ\text{C}$
Forward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

- (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

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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
 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

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