

**SOT23 PNP SILICON HIGH
SPEED SWITCHING DIODE**

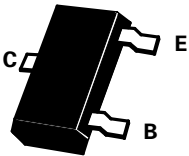
ISSUE 3 – FEBRUARY 1996

BAS16

PIN CONFIGURATION



PARTMARKING DETAILS
BAS16 – A6



SOT23

ABSOLUTE MAXIMUM RATINGS.

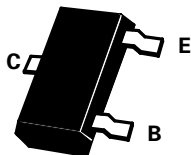
PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetative Reverse Voltage	V_{RRM}	85	V
Repetative Peak Forward Current	I_{FRM}	250	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j:T_{stg}$	-55 to +150	$^{\circ}C$

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

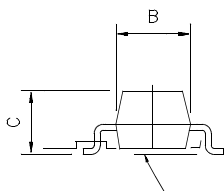
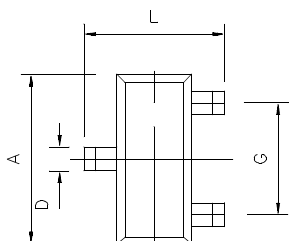
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Forward Voltage	V_F			715 855 1000 1250		$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse Current	I_R			30 1 50	nA mA	$V_R=25V, T_j=150^{\circ}C$ $V_R=75V$ $V_R=75V, T_j=150^{\circ}C$
Forward Recovery Voltage	V_{FR}			1.75		Switched to $I_F=10mA, t_r=20ns$
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

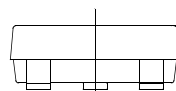
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DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	2.67	3.05	0.105	0.120
B	1.20	1.40	0.047	0.055
C	–	1.10	–	0.043
D	0.37	0.53	0.0145	0.021
F	0.085	0.15	0.0033	0.0059
G	NOM 1.9		NOM 0.075	
K	0.01	0.10	0.0004	0.004
L	2.10	2.50	0.0825	0.0985
N	NOM 0.95		NOM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



STAND OFF HEIGHT K



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