

## Surface mount switching diode

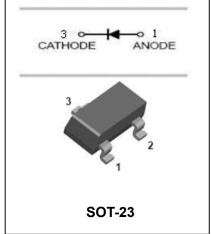
#### **BAS16**

#### **FEATURES**

- Fast switching speed.
- Surface mount package ideally suited for Automatic insertion.
- For general purpose switching applications.
- High conductance.







## **APPLICATIONS**

High speed switching application.

#### ORDERING INFORMATION

Type No.	Marking	Package Code
BAS16□	A6	SOT-23

□: none is for Lead Free package;

"G" is for Halogen Free package.

#### MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Limits	Unit
Repetitive Peak reverse voltage	$V_{RM}$	85	V
DC Reverse Voltage	$V_{R}$	75	V
Forward Continuous Current	I <sub>F</sub>	250	mA
Non-Repetitive Peak Forward Surge Current @t=1.0µs	I <sub>FSM</sub>	4.5	Α
Power Dissipation T <sub>S</sub> =54°C	$P_d$	370	mW
Thermal Resistance Junction to Ambient Air	$R_{ heta JA}$	375	°C/W
Operating Junction Temperature Range	Tj	150	$^{\circ}$ C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	$^{\circ}$

SWM0045A www.gmesemi.com



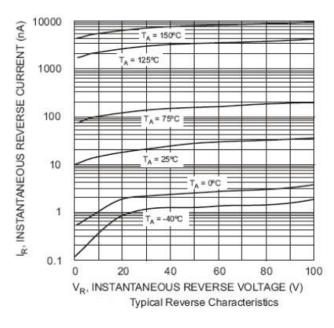
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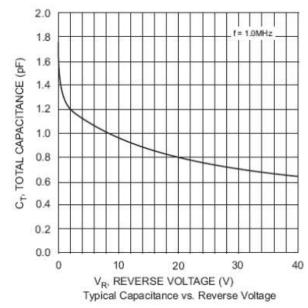
### **BAS16**

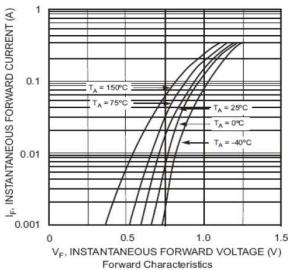
#### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	MAX	UNIT	Test Condition	
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	1	V	I <sub>R</sub> = 100μA	
	V <sub>FM</sub>			0.715		I <sub>F</sub> =1mA	
Forward Voltage		\ /			0.855	V	I <sub>F</sub> =10mA
Forward Voltage		VFM -	-   -	1.0	V	I <sub>F</sub> =50mA	
				1.25		I <sub>F</sub> =150mA	
Reverse Leakage Current	I <sub>R</sub>	-	-	1.0	μΑ	V <sub>R</sub> =70V	
Junction Capacitance	C <sub>j</sub>	-	-	2	pF	V <sub>R</sub> =0V,f=1.0MHz	
Reverse Recovery Time	t <sub>rr</sub>	-	-	4	ns	$I_F=I_R=10$ mA, $R_L=100$ Ω	

#### TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified









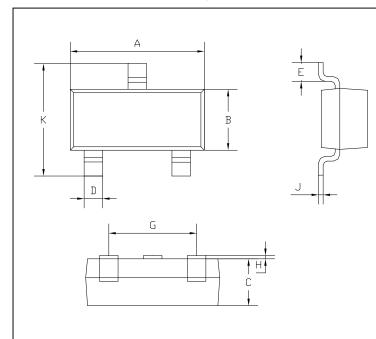
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# **BAS16**

### PACKAGE OUTLINE

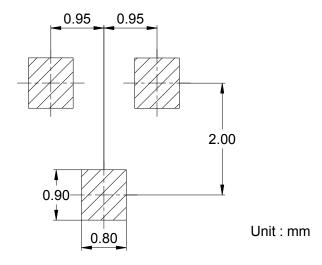
Plastic surface mounted package

SOT-23



SOT-23		
Dim	Min	Max
Α	2.70	3.10
В	1.10	1.50
С	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
Н	0.02	0.10
J	0.05	0.15
K	2.20	2.60
All Dimensions in mm		

# **SOLDERING FOOTPRINT**



### PACKAGE INFORMATION

Device	Package	Shipping
BAS16	SOT-23	3000/Tape&Reel

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