

**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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### BAS16X

## 150mW 75Volt **Switching Diode**

### **Features**

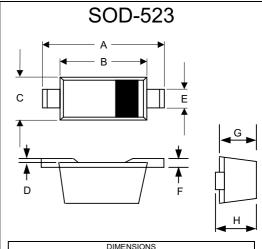
- Lead Free Finish/Rohs Compliant("P"Suffix designates Compliant. See ordering information)
  Ultra-Small Surface Mount Package
- Fast Switching Speed
- For General Purpose Switching Applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking: A6

## **Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 635°C/W Junction To Ambient

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

DC Reverse Voltage	$V_R$	75V	
Reverse breakdown voltage	$V_{(BR)R}$	75V	I <sub>R</sub> =100uA
Forward Current	I <sub>F</sub>	200mA	
Power Dissipation	$P_{D}$	150mW	
Peak Forward Surge	I <sub>FSM</sub>	500mA	
Current			
Maximum		715mV	$I_F = 1mA$
Instantaneous	$V_{F}$	815mV	$I_F = 10mA;$
Forward Voltage		1000mV	$I_F = 50 \text{mA}$
		1250mV	I <sub>F</sub> = 150mA
Maximum DC		1μΑ	V <sub>R</sub> =75Volts
Reverse Current At	$I_R$		$T_J = 25^{\circ}C$
Rated DC Blocking		50μΑ	T <sub>J</sub> = 150°C
Voltage			
Typical Diode	$C_D$	2pF	Measured at
Capacitance			1.0MHz, $V_R$ =0V
Reverse Recovery	T <sub>rr</sub>	6nS	$I_F=I_R=10$ mAdc,
Time			$V_R = 0V$
			$R_L=50\Omega$



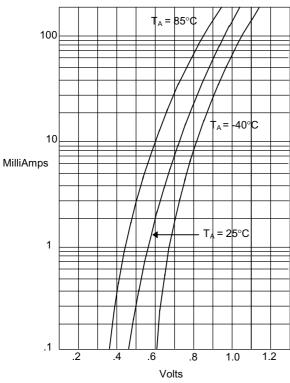
DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.059	.067	1.50	1.70		
В	.043	.051	1.10	1.30		
С	.030	.033	0.75	0.85		
D	.001	.003	0.01	0.07		
E	.010	.014	0.25	0.35		
F	.003	.003	0.08	0.15		
G	.020	.028	0.50	0.70		
Н	.020	.031	0.51	0.78		
Suggested Solder Pad Layout						
1.1mm —						
		0.8mm				

0.6mm

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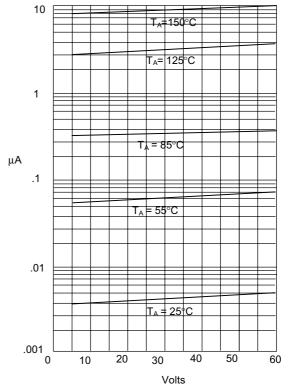
Figure 1 Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

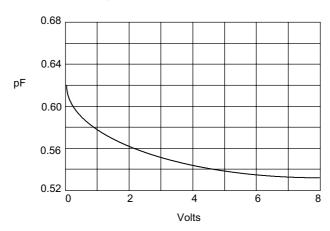
Figure 2

Micro Commercial Components
Typical Reverse Characteristics



Instantaneous Reverse Current - MicroAmperes/ersus Reverse Voltage - Volts

Figure 3 Diode Capacitance



Diode Capacitance - pFversus Reverse Voltage - Volts



### **Ordering Information**

Device	Packing	
(Part Number)-TP	Tape&Reel3Kpcs/Reel	

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