



# BAS16X

## 150mW 75Volt Switching Diode

### Features

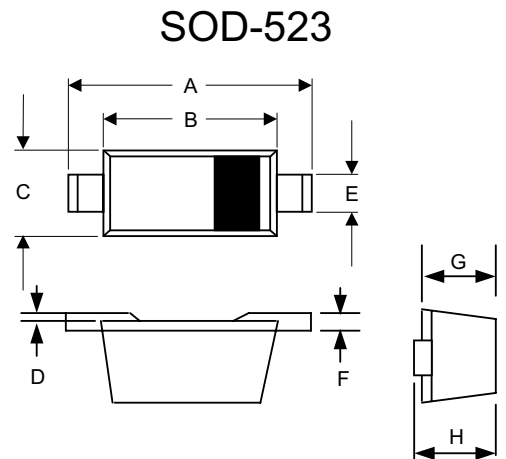
- Lead Free Finish/Rohs Compliant("P" Suffix designates Compliant. See ordering information)
- Ultra-Small Surface Mount Package
- Fast Switching Speed
- For General Purpose Switching Applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : A6
- Halogen free available upon request by adding suffix "-HF"

### 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

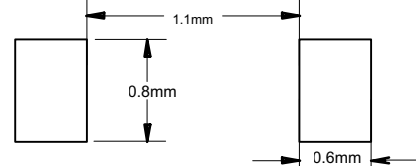
### Electrical Characteristics @ 25°C Unless Otherwise Specified

DC Reverse Voltage	$V_R$	75V	
Reverse breakdown voltage	$V_{(BR)R}$	75V	$I_R=100\mu A$
Forward Current	$I_F$	200mA	
Power Dissipation	$P_D$	150mW	
Peak Forward Surge Current	$I_{FSM}$	500mA	
Maximum Instantaneous Forward Voltage	$V_F$	715mV 815mV 1000mV 1250mV	$I_F = 1mA$ $I_F = 10mA;$ $I_F = 50mA$ $I_F = 150mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1 $\mu A$ 50 $\mu A$	$V_R=75Volts$ $T_J = 25^\circ C$ $T_J = 150^\circ C$
Typical Diode Capacitance	$C_D$	2pF	Measured at 1.0MHz, $V_R=0V$
Reverse Recovery Time	$T_{rr}$	6nS	$I_F=I_R=10mAdc,$ $V_R = 0V$ $R_L=50\Omega$



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.77	

Suggested Solder Pad Layout

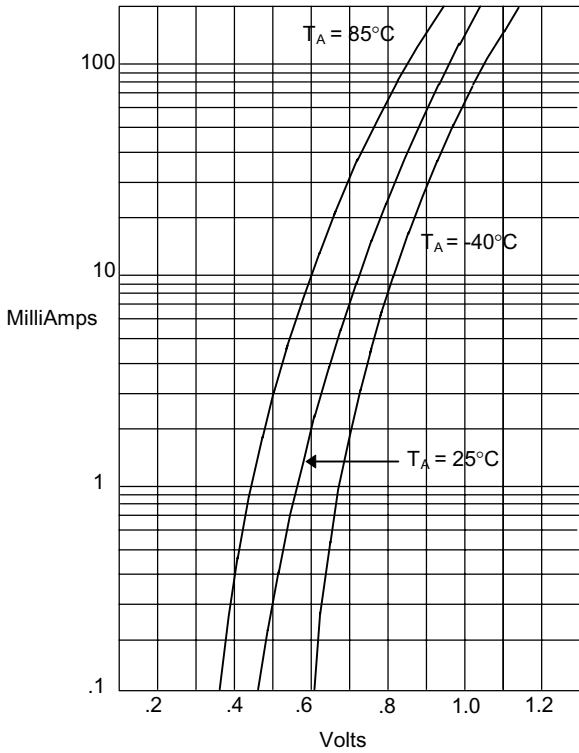


# BAS16X



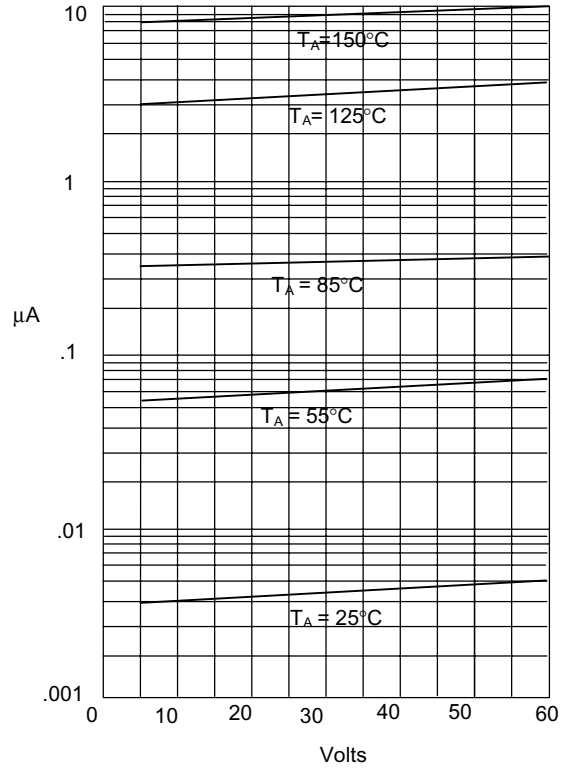
Micro Commercial Components™

Figure 1  
Typical Forward Characteristics



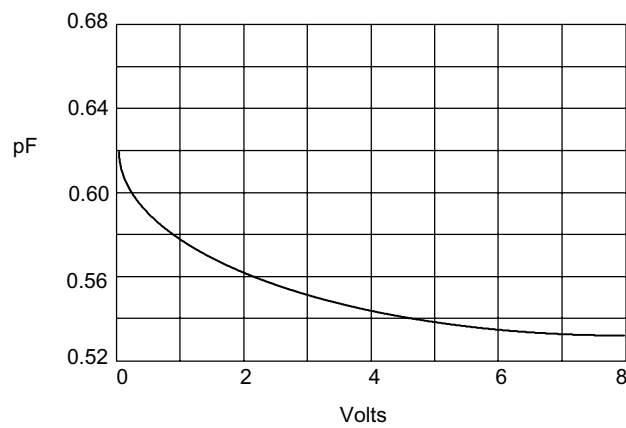
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



Instantaneous Reverse Current - MicroAmperes *versus*  
Reverse Voltage - Volts

Figure 3  
Diode Capacitance



Diode Capacitance - pF *versus*  
Reverse Voltage - Volts



TM

Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.