

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

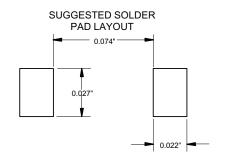
#### BAS16WX

## **High Speed**

### **Switching Diode** 350mW

# **SOD323** С

	DIMENSIONS						
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX			
Α	.090	.107	2.30	2.70			
В	.063	.071	1.60	1.80			
С	.045	.053	1.15	1.35			
D	.031	.045	0.80	1.15			
Е	.010	.016	0.25	0.40			
G	.004	.018	0.10	0.45			
Н	.004	.010	0.10	0.25			
J		.006		0.15			



#### Features

- **High Conductance**
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

#### **Mechanical Data**

- Marking: A6/T4
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by Cathode Band

#### Maximum Ratings @ 25°C Unless Otherwise Specified

Non-Repetitive Peak Reverse Volt.	$V_{RM}$	85	V
Peak Repetitive Reverse Voltage	$V_{_{ m RRM}}$		
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current(Note1)	$I_{FM}$	200	mA
Average Rectified Output Current	Io	100	mA
Non-Repetitive Peak @ t<=1.0s	т	2	٨
Forward Surge Current @ t=10us	1 <sub>FSM</sub>	1	A
Power Dissipation(Note 1)	Pd	350	mW
Thermal Resistance(Note 1)	R	315	K/W
Operation/Storage Temp. Range	т; т	-55 to	00
Operation/Storage Temp. Range	Tj, T <sub>STG</sub>	+150	℃

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

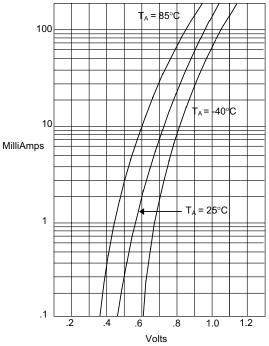
Maximum Forward Voltage Drop	$V_{FM}$	0.715 0.855 1 1.25	٧	I <sub>F</sub> =1.0mA I <sub>F</sub> =10mA I <sub>F</sub> =50mA
Maximum Peak Reverse Current	lкм	1.0		V <sub>R</sub> =75V Tj=25°C V <sub>R</sub> =75V Tj=150°C
Junction Capacitance	Cj	2	рF	V <sub>R</sub> =0V, f=1.0MHz
Reverse Recovery Time	trr	6	ns	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1I <sub>R</sub> , R <sub>L</sub> =100 OHM

1. Valid provided that terminals are kept at ambient temperature

#### BAS16WX

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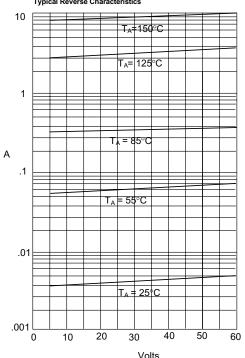
Figure 1 Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

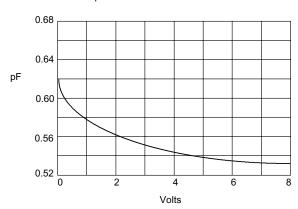
Figure 2

Micro Commercial Components



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&Reel: 3Kpcs/Reel

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

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