

# BAS16WX

## High Speed Switching Diode 350mW

### 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

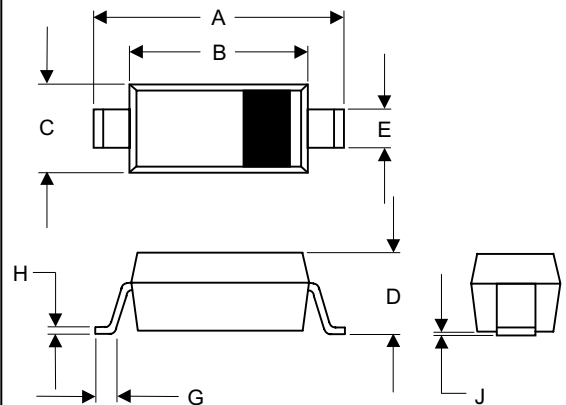
|                                       |                |             |     |
|---------------------------------------|----------------|-------------|-----|
| Non-Repetitive Peak Reverse Volt.     | $V_{RM}$       | 85          | V   |
| Peak Repetitive Reverse Voltage       | $V_{RRM}$      |             |     |
| Working Peak Reverse Voltage          | $V_{RWM}$      | 75          | V   |
| DC Blocking Voltage                   | $V_R$          |             |     |
| RMS Reverse Voltage                   | $V_{R(RMS)}$   | 53          | V   |
| Forward Continuous Current(Note1)     | $I_{FM}$       | 200         | mA  |
| Average Rectified Output Current      | $I_o$          | 100         | mA  |
| Non-Repetitive Peak @ $t \leq 1.0s$   | $I_{FSM}$      | 2           | A   |
| Forward Surge Current @ $t = 10\mu s$ |                | 1           |     |
| Power Dissipation(Note 1)             | $P_d$          | 350         | mW  |
| Thermal Resistance(Note 1)            | $R$            | 315         | K/W |
| Operation/Storage Temp. Range         | $T_j, T_{STG}$ | -55 to +150 | °C  |

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

|                              |          |                             |                    |                                                                |
|------------------------------|----------|-----------------------------|--------------------|----------------------------------------------------------------|
| Maximum Forward Voltage Drop | $V_{FM}$ | 0.715<br>0.855<br>1<br>1.25 | V                  | $I_F = 1.0mA$<br>$I_F = 10mA$<br>$I_F = 50mA$<br>$I_F = 150mA$ |
| Maximum Peak Reverse Current | $I_{RM}$ | 1.0<br>50                   | $\mu A$<br>$\mu A$ | $V_R = 75V T_j = 25^\circ C$<br>$V_R = 75V T_j = 150^\circ C$  |
| Junction Capacitance         | $C_j$    | 2                           | pF                 | $V_R = 0V, f = 1.0MHz$                                         |
| Reverse Recovery Time        | $t_{rr}$ | 6                           | ns                 | $I_F = I_R = 10mA, I_{rr} = 0.1I_R, R_L = 100 OHM$             |

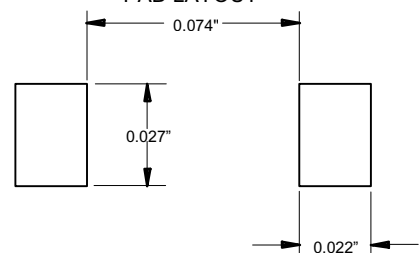
Notes: 1. Valid provided that terminals are kept at ambient temperature

### SOD323



| DIM | INCHES |      | MM    |      | NOTE |
|-----|--------|------|-------|------|------|
|     | MIN    | MAX  | MIN   | MAX  |      |
| A   | .090   | .107 | 2.30  | 2.70 |      |
| B   | .063   | .071 | 1.60  | 1.80 |      |
| C   | .045   | .053 | 1.15  | 1.35 |      |
| D   | .031   | .045 | 0.80  | 1.15 |      |
| E   | .010   | .016 | 0.25  | 0.40 |      |
| G   | .004   | .018 | 0.10  | 0.45 |      |
| H   | .004   | .010 | 0.10  | 0.25 |      |
| J   | -----  | .006 | ----- | 0.15 |      |

### SUGGESTED SOLDER PAD LAYOUT

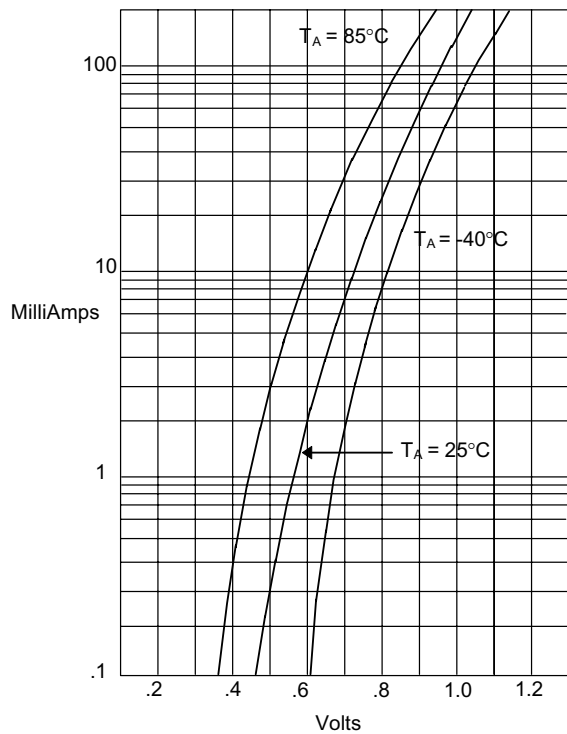


# BAS16WX



Micro Commercial Components™

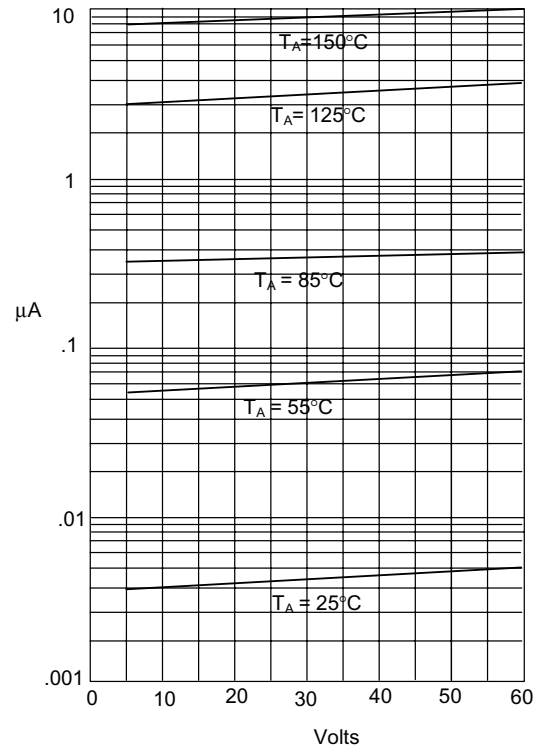
Figure 1  
Typical Forward Characteristics



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

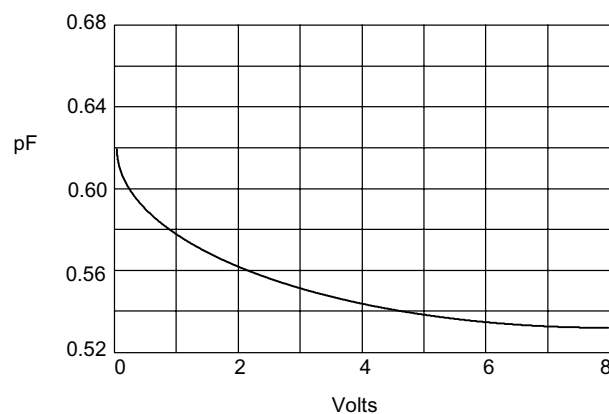
Figure 2

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: 3Kpcs/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.

---

**www.mccsemi.com**

---

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)