

#### **Features**

- · Low Current Leakage
- Low Cost
- · Small Outline Surface Mount Package
- · Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

### **Maximum Ratings**

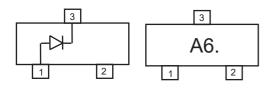
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Note2): 357°C/W Junction to Ambient

MCC Part Number	Repetitive Peak Reverse Voltage V <sub>RRM</sub>	RMS Reverse Voltage V <sub>R(RMS)</sub>	Reverse Voltage V <sub>R</sub>	
BAS16	100V	70V	100V	

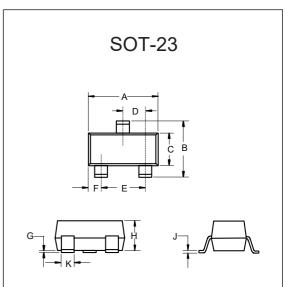
Parameter	Symbol	Value	
Peak Reverse Voltage	$V_{RM}$	100V	
Working Peak Reverse Voltage	$V_{RWM}$	100V	
Peak Forward Current	l <sub>F</sub>	215mA	
Peak Forward Surge Current (t=1s) (t=0.1ms)	I <sub>FSM</sub>	1A 4A	
Power Dissipation	P <sub>D</sub>	350mW	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

#### **Internal Structure and Marking Code**

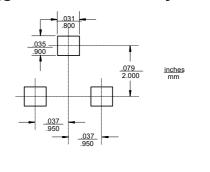


# 350mW 100Volt Switching Diode



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.110	0.120	2.80	3.04	
В	0.083	0.104	2.10	2.64	
С	0.047	0.055	1.20	1.40	
D	0.035	0.041	0.89	1.03	
E	0.070	0.081	1.78	2.05	
F	0.018	0.024	0.45	0.60	
G	0.0005	0.0039	0.01	0.10	
Н	0.035	0.044	0.89	1.12	
J	0.003	0.007	0.085	0.180	
K	0.015	0.020	0.37	0.51	

## **Suggested Solder Pad Layout**



<sup>2.</sup> Part mounted on FR-4 board with recommended pad layout.



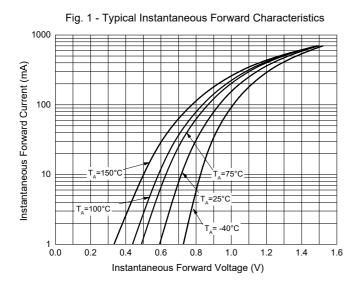
## Electrical Characteristics @ 25°C (Unless Otherwise Specified)

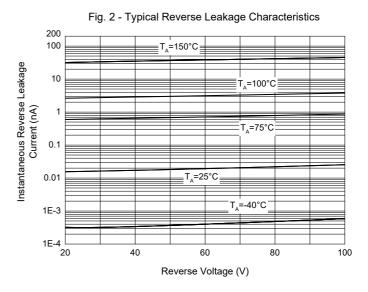
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Breakdown Voltage	$V_{BR}$	I <sub>R</sub> =100μA	100			V
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	I <sub>FM</sub> =1mA			0.715	V
		I <sub>FM</sub> =10mA			0.855	V
		I <sub>FM</sub> =50mA			1	V
		I <sub>FM</sub> =100mA			1.25	V
Maximum DC Reverse Current	I <sub>R</sub>	V <sub>R</sub> =75V, T <sub>J</sub> =25°C			1	μA
		V <sub>R</sub> =75V, T <sub>J</sub> =150°C			50	μA
Junction Capacitance	CJ	$V_R = 0V$ , $f = 1MHz$		2		pF
Reverse Recovery Time	t <sub>rr</sub>	$I_F=10\text{mA},$ $V_R=6.0V,R_L=100\Omega$			4	ns

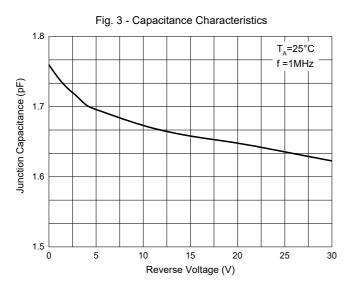
 $<sup>^{\</sup>star}$  Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

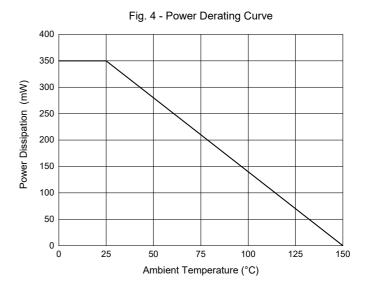


### **Curve Characteristics**











### **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel: 3Kpcs/Reel		
Part Number-13P	Tape&Reel: 10Kpcs/Reel		

#### \*\*\*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. **Micro Commercial Components Corp**, products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

#### \*\*\*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.

# 单击下面可查看定价,库存,交付和生命周期等信息

# >>MICRO COMMERCIAL