

# Micro Commercial Components Corp.

Complete Discrete Semiconductor Solutions

package type VRM(PRV) Ifsm IF(AV)	SWITCHING DIODES SOD-123 120V 1.0A
VRM(PRV)  Ifsm  IF(AV)	120V 1.0A
Ifsm IF(AV)	1.0A
IF(AV)	·
	200mA
@Vf	1.0V
@If	100mA
Trr	50ns
IR	100nA
@VR	100V
Package Qty	Tape: 3K/Reel, 120K/Ctn;



**Micro Commercial Components** 

## BAV19W THRU BAV21W

# 410mW Small Signal Diodes 120 to 250 Volts

## **Features**

- Silicon Epitaxial Planar Diodes
- For General Purpose
- This diode is also available in other case.
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

#### **Mechanical Data**

 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

• Marking code: BAV19W=A8

BAV20W=T2 or A80 BAV21W=T3 or A82

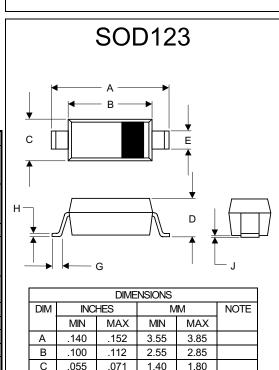
## **Maximum Ratings**

Symbol	Rating		Rating	Unit
	Continuous Reverse Voltage	BAV19W	100	
$V_R$		BAV20W	150	V
		BAV21W	200	
	Repetitive Peak Reverse Voltage	BAV19W	120	
$V_{RRM}$		BAV20W	200	V
		BAV21W	250	
I <sub>F</sub>	Forward DC Current at Tamb=25°C <sup>1)</sup>		250	mA
	Rectified Current (Average) Half	Wave		
$I_{F(AV)}$	Rectification with Resist. Load at		200	mΑ
	Tamb=25 <sup>o</sup> C <sup>(1)</sup>			
I <sub>FRM</sub>	Repetitive Peak Forward Current at f>50Hz,		625	mΑ
	Tamb=25 <sup>o</sup> C <sup>(1)</sup>			
I <sub>FSM</sub>	Surge Forward Current at t<1s, Tj=25°C		1.0	Α
P <sub>tot</sub>	Power Dissipation at Tamb=25°C(1)		410	mW
$R_{JA}$	Thermal Resistance Junction to Ambient Air		375	mW
T,	Junction Temperature		-55 to +150	သ
$T_{STG}$	Storage Temperature		-55 to +150	လ

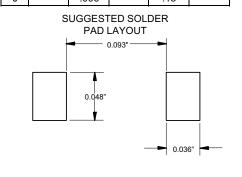
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter			Тур	Max	Units
V <sub>F</sub>	Forward Voltage	(I <sub>F</sub> =100mA) (I <sub>F</sub> =200mA)			1.00 1.25	V
I <sub>R</sub>	Leakage Current (V <sub>R</sub> =100V)	BAV19W			100	nΛ
	(V <sub>R</sub> =100V) (VR=100V, Tj=100°C)	BAV19W			15	nA uA
	(V <sub>R</sub> =150V)	BAV20W			100	nA
	(VR=150V, Tj=100°C)	BAV20W			15	uA
	(V <sub>R</sub> =200V)	BAV21W			100	nA
	(VR=200V, Tj=100°C)	BAV21W			15	uA
r <sub>f</sub>	Dynamic Forward Resistance (‡=10mA)			5.0		ОНМ
C <sub>tot</sub>	Capacitance (V <sub>R</sub> =0, f=1.0MHz)		1	1.5	1	pF
t <sub>rr</sub>	Reverse Recovery Time (\$\psi = 30mA, \$\psi = 30mA\$) (Irr=3.0mA, \$\paralle = 1000HN	MS)			50	ns

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



DIIVIENSIONS					
INC	INCHES		MM		
MIN	MAX	MIN	MAX		
.140	.152	3.55	3.85		
.100	.112	2.55	2.85		
.055	.071	1.40	1.80		
	.053		1.35		
.012	.031	0.30	.78		
.006		0.15			
	.01		.25		
	.006		.15		
	MIN .140 .100 .055012	INCHES   MIN   MAX   .140   .152   .100   .112   .055   .071     .053   .012   .031   .006     .01	INCHES         M           MIN         MAX         MIN           .140         .152         3.55           .100         .112         2.55           .055         .071         1.40            .053            .012         .031         0.30           .006          0.15            .01	INCHES         MM           MIN         MAX         MIN         MAX           .140         .152         3.55         3.85           .100         .112         2.55         2.85           .055         .071         1.40         1.80            .053          1.35           .012         .031         0.30         .78           .006          0.15             .01          .25	





### **Ordering Information**

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

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