



**Micro Commercial Components** 

#### Features Saving Space

- Silicon Epitaxial Planar Diodes
- Hermetic Sealed Parts
- Fits onto SOD-323/SOT-23 footprints
- Electrical data identical with the devices BAV100...BAV103
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

### **Maximum Ratings**

Continuous Reverse			
Voltage BAV300 BAV301 BAV302 BAV303	V <sub>R</sub>	50V 100V 150V 200V	T <sub>A</sub> =25℃
Repetitive Peak Reverse			
Voltage BAV300 BAV301 BAV302 BAV303	V <sub>RRM</sub>	60V 120V 200V 250V	T <sub>A</sub> =25℃
Forward DC Current	I <sub>F</sub>	250mA	T <sub>A</sub> =25℃
Repetitive Peak Forward Current	I <sub>FRM</sub>	625mA	f=50Hz, T <sub>A</sub> =25°C
Surge Forward Current	I <sub>FSM</sub>	1.0A	T <sub>P</sub> =1s, T <sub>j</sub> =25℃
Thermal Resistance Junction to Ambient	R <sub>thJA</sub>	500K/W	Note 2
Junction temperature	Tj	175℃	
Storage temperature Range	T <sub>stg</sub>	-65 to + 175℃	

**Micro Commercial Components** 

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**Switching Diodes** 



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

Maximum Forward Voltage	V <sub>F</sub>	1.00V	$I_{F}=100mA~, T_{A}{=}25^{\circ}\!\mathrm{C}$
Maximum Leakage current BAV300 BAV300 BAV301 BAV301 BAV302 BAV302 BAV303 BAV303 Maximum Leakage current BAV300 BAV301 BAV301	I <sub>R</sub>	100nA 15 μ A 100nA 15 μ A 100nA 15 μ A 100nA 15 μ A 60V 120V	V <sub>R</sub> =50V V <sub>R</sub> =50V, Tj=100°C V <sub>R</sub> =100V, Tj=100°C V <sub>R</sub> =150V V <sub>R</sub> =150V, Tj=100°C V <sub>R</sub> =200V V <sub>R</sub> =200V, Tj=100°C
BAV302 BAV303	V (BR)	200V 250V	tP=0.3ms
Diode Capacitance	CD	1.5pF	V <sub>R</sub> =0V, f=1.0MHz
Maximum Reverse recovery time	t <sub>rr</sub>	50ns	I <sub>F</sub> =10mA, I <sub>R</sub> =30mA I <sub>rr</sub> =3.0mA, R <sub>L</sub> =100Ω
Differential Forward Resistance	٢ <sub>F</sub>	5.0 Ω	I <sub>F</sub> =10mA

Notes: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5. 2.mounted on epoxy-glass hard tissue, Fig.4 35  $\mu$  m copper clad, 0.9  $\text{mm}^2$ 

copper area per electrode





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### **Revision:** A

### 2011/01/01

## **BAV300** THRU **BAV303**





Fig. 1 Reverse Current vs. Junction Temperature



Fig. 2 Forward Current vs. Forward Voltage



Fig. 3 Differential Forward Resistance vs. Forward Current

### 0.355 25

0.152

 $\cdot M \cdot C \cdot C \cdot$ 

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1.27

0.71



Fig. 4 Board for R<sub>thJA</sub> definition (in mm)

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### **Ordering Information :**

Device	Packing	
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel	

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