

## Small Signal Switching Diodes

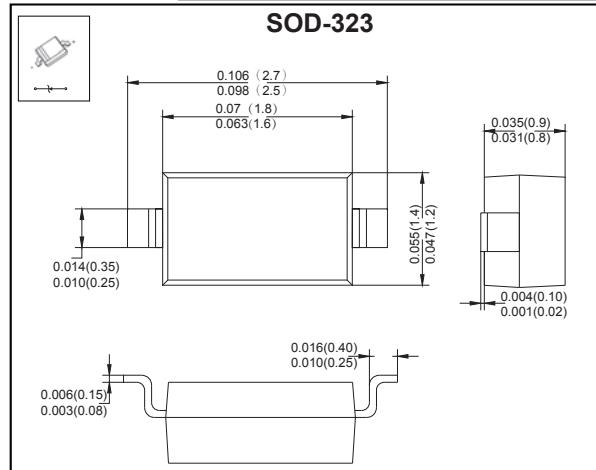
VOLTAGE RANGE: 120V-250V  
PEAK PULSE POWER: 250mW

### FEATURES

- Fast Switching Device (TRR <50nS)
- Power Dissipation of 250mW
- High Stability and High Reliability
- Low reverse leakage

### MECHANICAL DATA

- Case: SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameters	Symbol	Value			Unit
		BAV19WS	BAV20WS	BAV21WS	
Reverse Voltage	VR	120	200	250	V
Peak Reverse Voltage	VRM	100	150	250	V
Power Dissipation	Pd	250			mW
Operating junction temperature	Tj		150		°C
Storage temperature range	Ts		-65-+150		°C
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>		500		°C/W
Working Inverse Voltage	WIV		75		V
Average Rectified Current	IO		200		mA
Non-repetitive Peak Forward Current	IFM		400		mA
Peak Forward Surge Current @tp=1ms; TA=25°C	IFSM		1.7		A

Valid provided that electrodes are kept at ambient temperature.

### ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C unless otherwise specified)

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
VRB	Reverse Voltage	IB=100uA BAV19WS BAV20WS BAV21WS	120 200 250	---	V
IR	Reverse Leakage Current	VR=100V BAV19WS VR=150V BAV20WS VR=200V BAV21WS	---	0.1	uA
VF	Forward Voltage	IF=100mA	---	1.00	V
		IF=200mA	---	1.25	
TRR		IF= 30mA, IR=30mA	---	50	nS
	Reverse Recovery Time	RL=100Ω			
		IRR=3mA			
C	Capacitance	VR=0V, f=1MHZ	---	5	pF

# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

