

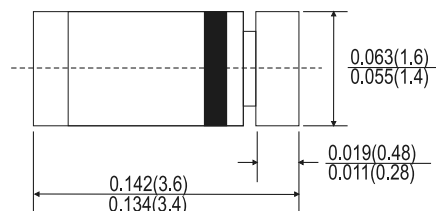
BAV100 THRU BAV103

SMALL SIGNAL SCHOTTKY DIODES

MINI MELF / SOD-80 / DO-213AA

FEATURES:

- Silicon epitaxial planar diode
- For general purpose applications
- Low forward voltage drop



MECHANICAL DATA

Case: MINI MELF glass case (SOD-80)
Weight: Approx. 0.05gram

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60 Hz resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	BAV100	BAV101	BAV102	BAV103	Units
Reverse voltage	V_{RM}	60	120	200	250	Volts
Maximum reverse voltage	V_R	50	100	150	200	Volts
Maximum Forward DC current at $T_{amb}=25^{\circ}C$ (NOTE 3)	I_F	0.25				Amps
Rectified current (Average) Half wave rectification with resist. Load at $f \geq 50Hz, \theta = 180^{\circ}C, T_{amb}=25^{\circ}C$ (NOTE 3)	I_o	0.20				Amps
Surge forward current at $< 1s, T_j=25^{\circ}C$	I_{FSM}	1.0				Amps
Repetitive peak forward current at $f \geq 50Hz, \theta = 180^{\circ}C, T_{amb}=25^{\circ}C$ (NOTE 3)	I_{FRM}	0.625				
Power dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	400				mW
Maximum instantaneous forward voltage at $I_F=100mA$	V_F	1.0				Volts
Maximum reverse current at	I_R	0.1 15	----	----	----	μA
		----	0.1 15	----	----	
		----	----	0.1 15	----	
		----	----	----	0.1 15	
		----	----	----	----	
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Typical Dynamic forward resistance at $I_F=10mA$		5				Ω
Typical reverse recover time (NOTE 1)	T_{RR}	50				nS
Typical capacitance (NOTE 2)	C_{tot}	1.5				P_F
Maximum Thermal resistance for Junction to Ambient Air	R_{th-JA}	0.375				K/mW
Operating temperature range	T_J	175				$^{\circ}C$
Storage temperature range	T_{Stg}	-65to +175				$^{\circ}C$

NOTES:

(1) Reverse Recovery Test CONDITION : $I_F=30mA$ through $I_R=30mA$ to $I_R=3mA, R_L=100\Omega$

(2) Measured at 1MHZ and reverse Voltage of 0.0V

(3) Valid provided that electrodes are kept at ambient temperature

