



SMALL SIGNAL SWITCHING DIODES

VOLTAGE RANGE: 50-200 V
CURRENT: 250 mA

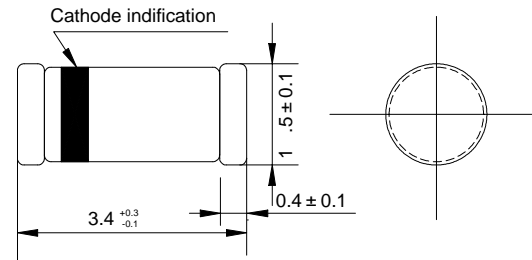
FEATURES

- Silicon epitaxial planar diode
High speed switching diode
500 mW power dissipation

MECHANICAL DATA

- Case: MINI-MELF,glass case
Polarity: Color band denotes cathode
Weight: Approx 0.031 grams

MINI-MELF



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

ABSOLUTE MAXIMUM RATINGS AND THERMAL RESISTANCE

Table with 6 columns: Parameter, Symbol, BAV100, BAV101, BAV102, BAV103, Unit. Rows include Reverse voltage (VR), Repetitive peak reverse voltage (VRRM), Forward current (IAV), Forward surge current (IFSM), Power dissipation (PV), Thermal resistance junction to ambient (RthetaJA), Thermal resistance junction to lead (RthetaJL), Junction temperature (Tj), and Storage temperature range (TSTG).

1) Device mounted on PC board 50mmx50mmx1.6mm .

ELECTRICAL CHARACTERISTICS

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=100\text{mA}$	V_F	-	-	1	V
Reverse current	$V_R=50\text{V}, T_J=25$ BAV100	I_R	-	-	100	n A
	$V_R=50\text{V}, T_J=100$ BAV100		-	-	15	μA
	$V_R=100\text{V}, T_J=25$ BAV101		-	-	100	n A
	$V_R=100\text{V}, T_J=100$ BAV101		-	-	15	μA
	$V_R=150\text{V}, T_J=25$ BAV102		-	-	100	n A
	$V_R=150\text{V}, T_J=100$ BAV102		-	-	15	μA
	$V_R=200\text{V}, T_J=25$ BAV103		-	-	100	n A
	$V_R=200\text{V}, T_J=100$ BAV103		-	-	15	μA
Breakdown voltage	$I_R=100\text{mA}, t_p/T=0.01, t_p=0.3\text{ms}$ BAV100	$V_{(BR)}$	60	-	-	V
			120	-	-	V
			200	-	-	V
			250	-	-	V
Diode capacitance	$V_R=0, f=1\text{MHz}$	C_D	-	1.5	-	pF
Differential forward resistance	$I_F=10\text{mA}$	r_f	-	5	-	Ω
Reverse recovery time	$I_F=I_R=30\text{mA}, i_R=3\text{mA}, R_L=100\Omega$	t_{rr}	-	-	50	ns

FIG 1. REVERSE CURRENT VS. JUNCTION TEMPERATURE

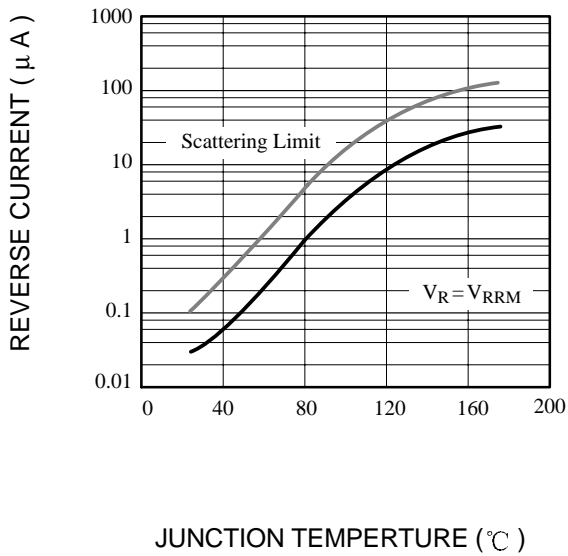
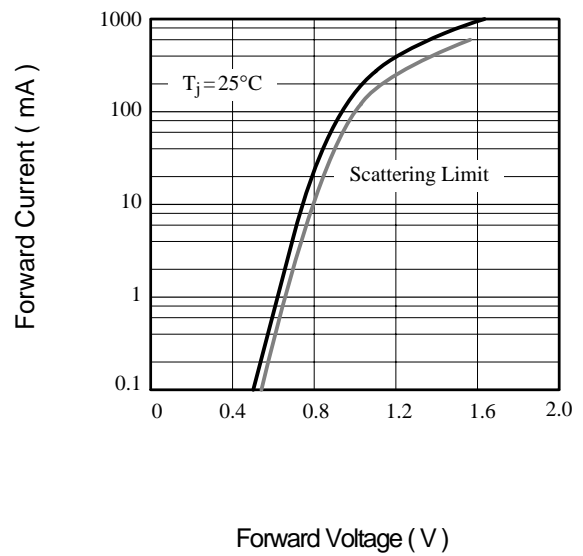


FIG 2. FORWARD CURRENT VS. FORWARD VOLTAGE



**FIG 3. DIFFERENTIAL FORWARD RESISTANCE
VS. FORWARD CURRENT**

