Elektronische Bauelemente

SMD103A THRU SMD103C

VOLTAGE 20V ~ 40V

0.35AMP Schottky Barrier Rectifiers

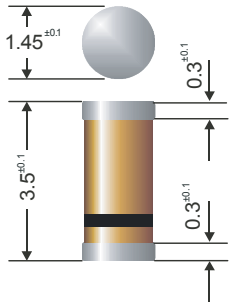
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

Features

* Low Forward Voltage Drop
* Guard Ring Construction for Transient Protection
* Low Reverse Recovery Time
* Low Reverse Capacitance

Mini MELF / SOD-80



Dimensions in millimeters

Mechanical Data

* Case:SOD-80
* Weight:0.05 grams (approx.)

Maximum Ratings

Characteristic	Item	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	SMD103A	V_{RRM}	40	V
	SMD103B		30	
	SMD103C		20	
Forward Continuous Current		I_{FM}	350	mA
RMS Reverse Voltage	SMD103A	V_R	28	V
	SMD103B		21	
	SMD103C		14	
Repetitive Peak Forward Current @ t≤1.0s		I_{FRM}	1.0	A
Power Dissipation at T_{amb}=25℃		P_{tot}	400	mW
Storage Temperature Range		T_s	-65 ~ +175	℃

Electrical Characteristics at Tj=25℃

Symbol			Min	Typ	Max	Unit
Forward Voltage	@I_F=20mA	V_F	-	-	0.37	V
	@I_F=200mA		-	-	0.6	
Maximum Peak Reverse Current						
SMD103A at V_R=30V		I_R	-	-	5.0	μA
SMD103B at V_R=20V		I_R	-	-	5.0	μA
SMD103C at V_R=10V		I_R	-	-	5.0	μA
Junction Capacitance at V_F=V_R=0f=1MHz		C_{tot}	-	50	-	pF
Reverse Recovery Time From I_F=-I_R=50mA to 200mA recover to 0.1 I_R		t_{rr}	-	10	-	ns
Thermal Resistance, Junction to Ambient Air		R_{thA}	-	0.25	-	K/mW

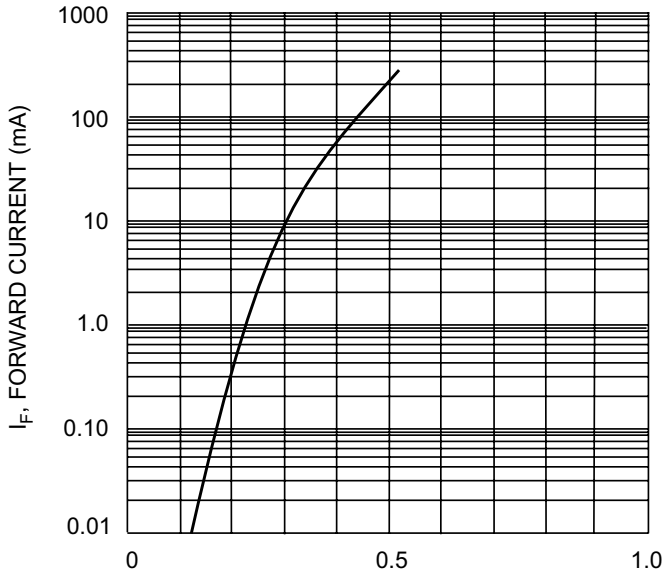


Fig. 1 Typical Forward Characteristics

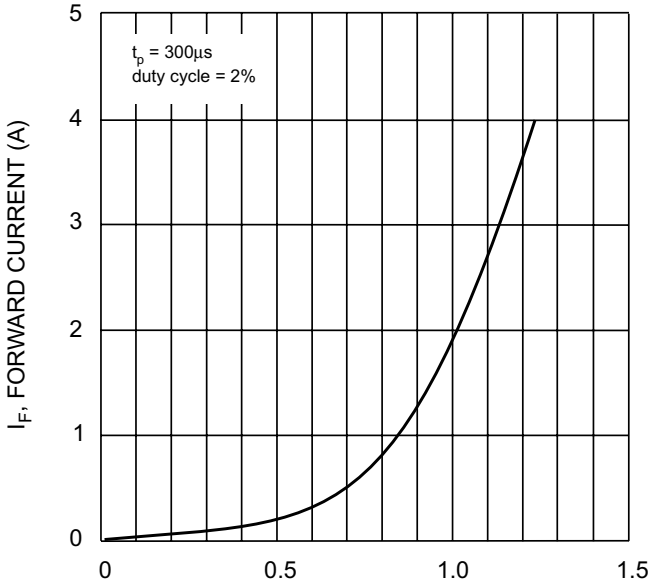


Fig. 2 Typical High Current Fwd Characteristics

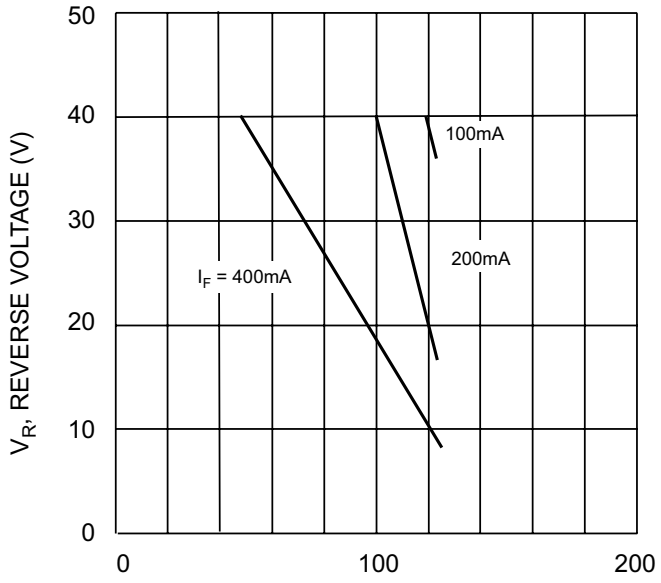


Fig. 3 Blocking Voltage Derating Curves

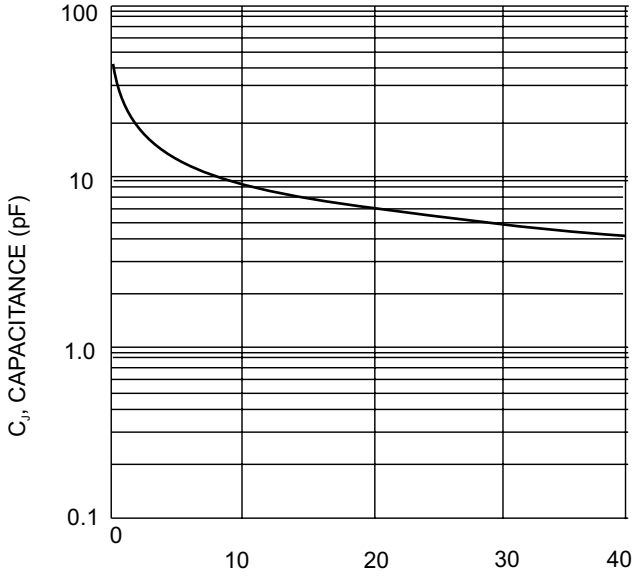


Fig. 4 Typ. Junction Capacitance vs Reverse Voltage