

RoHS Compliant Product

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

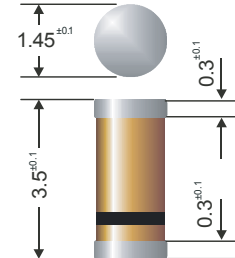
Features

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

Mechanical Data

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

Mini MELF / SOD-80



Dimensions in millimeters

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 @ $t \leq 1.0s$		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 $T_j=25^\circ C$

Symbol		Min	Typ	Max	Unit
Forward Voltage	@ $I_F=20mA$	-	-	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

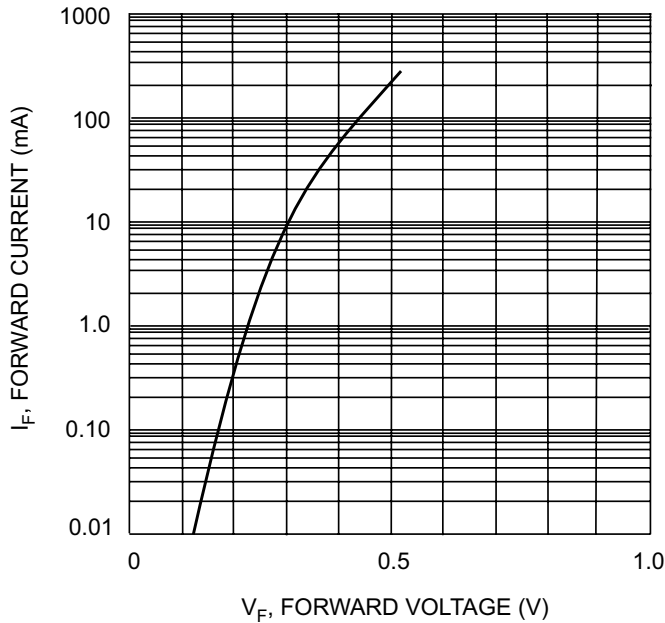


Fig. 1 Typical Forward Characteristics

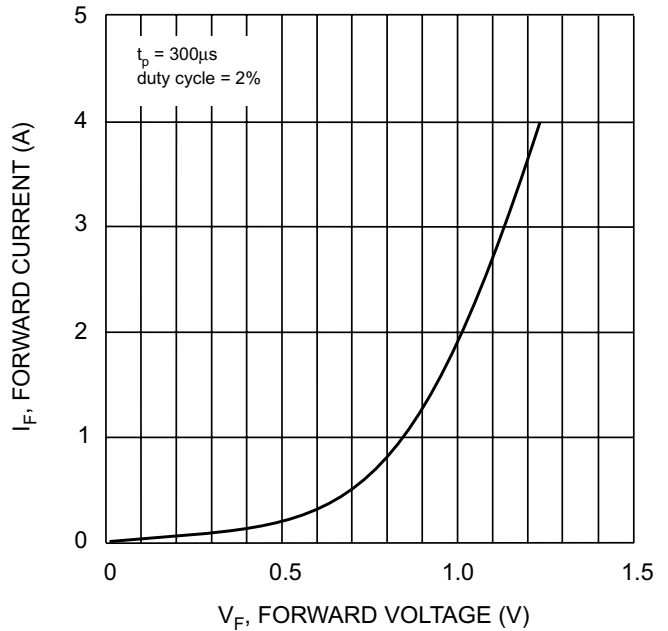


Fig. 2 Typical High Current Fwd Characteristics

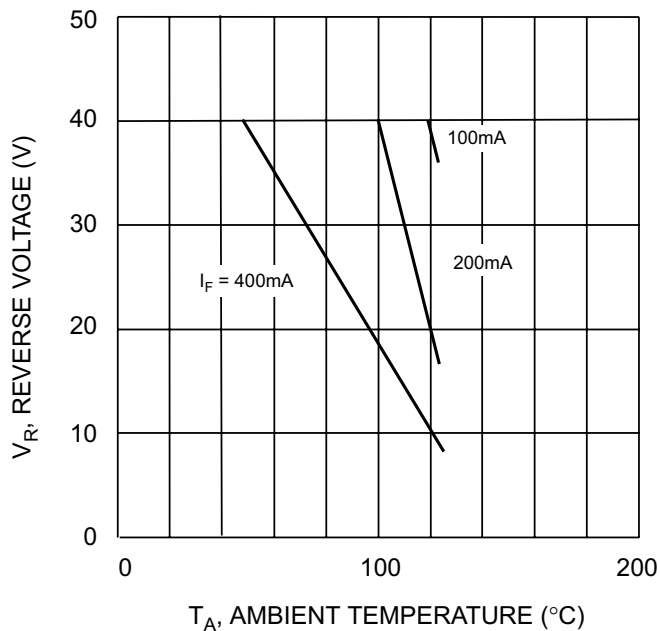


Fig. 3 Blocking Voltage Derating Curves

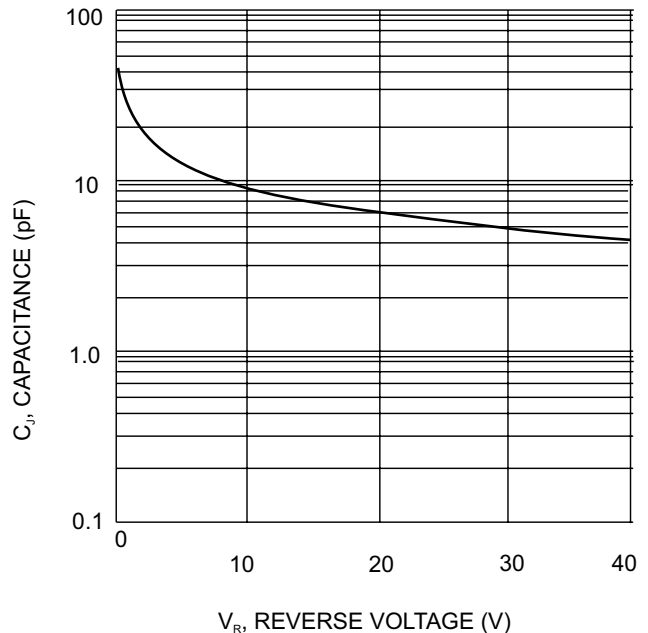


Fig. 4 Typ. Junction Capacitance vs Reverse Voltage