

Features

- Lead Free



MiniMELF
(SOD-80)

Maximum Ratings ($T_A=25^{\circ}\text{C}$ otherwise specified)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Current	At $t=1\text{s}$	0.5	A
	At $t=1\text{ms}$	1	
	At $t=1\mu\text{s}$	4	
Power Dissipation	P_D	500	mW
Junction Temperature	T_J	175	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +175	$^{\circ}\text{C}$
Junction-to-Ambient ¹	$R_{\theta JA}$	300	$^{\circ}\text{C/W}$

Note:

- Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage tested with 100 μA Pulses	$V_{(BR)R}$	100	-	V
Forward Voltage at $I_F=10\text{mA}$	V_F	-	1	V
Leakage Current	At $V_R=20\text{V}$	-	25	nA
	At $V_R=75\text{V}$	-	5	μA
	At $V_R=20\text{V}$, $T_J=150^{\circ}\text{C}$	-	50	μA
Capacitance at $V_R=0$, $f=1\text{MHz}$	C_{tot}	-	4	pF
Voltage Rise when Switching on tested with 50mA Forward Pulses $t_p=0.1\text{s}$, Rise Time $<30\text{ns}$, $f_p=5$ to 100KHz	V_{fr}	-	2.5	V
Reverse Recovery Time at $I_F=10\text{mA}$, $I_{rr}=0.1 \times I_R$, $V_R=6\text{V}$, $R_L=100\Omega$	t_{rr}	-	4	ns
Rectification Efficiency at $F=100\text{MHz}$, $V_{RF}=2\text{V}$	η_V	0.45	-	-

Electrical Characteristics Curves

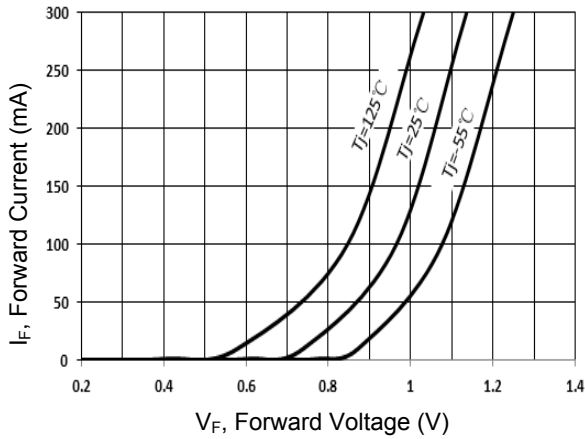


Figure 1. Forward Characteristics

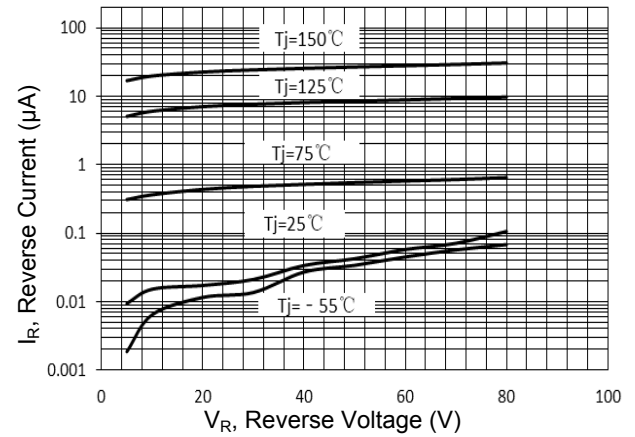


Figure 2. Reverse Characteristics

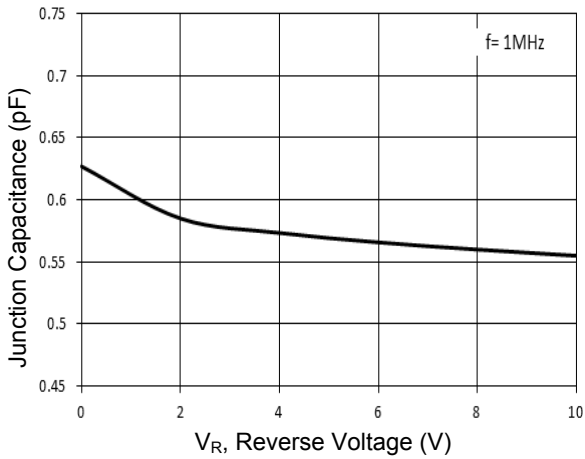


Figure 3. Junction Capacitance

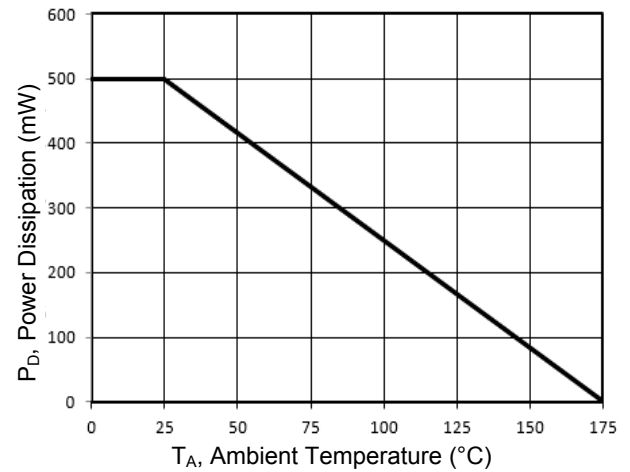


Figure 4. Power Derating Curves

Package Outline Dimensions MiniMELF(SOD-80)

