

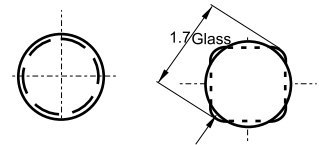
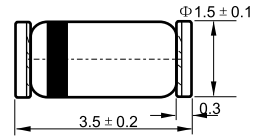


**Reverse Voltage: 30Volts**

**Forward Current:0.2Amps**



### MINI MELF



Dimension in millimeters

### Features

- ✧ For general applications
- ✧ Low turn-on voltage
- ✧ PN junction guard ring

### Mechanical Data

- ✧ Glass case
- ✧ Weight: 0.05g (approx)

### 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	Value	Unit
Continuous reverse voltage	$V_R$	30	V
Forward continuous current*	$I_F$	200	mA
Peak forward current*	$I_{FM}$	300	mA
Surge forward current* @ $t_p = 1s$	$I_{FSM}$	5.0	A
Power dissipation* @ $T_A = 65^\circ C$	$P_{tot}$	200	mW
Junction temperature	$T_j$	125	$^\circ C$
Operating temperature range	$T_A$	-65 to +125	$^\circ C$
Storage temperature range	$T_{STG}$	-65 to +150	$^\circ C$

### Electrical Characteristics @ $T_j = 25^\circ C$ unless otherwise specified

	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage	$V_R$	30.0			V
Forward voltage Pulse test $t_p < 300 \mu s, \delta < 2\%$ @ $I_F = 0.1mA$ @ $I_F = 1mA$ @ $I_F = 10mA$ @ $I_F = 30mA$ @ $I_F = 100mA$	$V_F$			0.24 0.32 0.4 0.5 0.8	V
Leakage current $V_R = 25V$	$I_R$			2.0	$\mu A$
Junction capacitance at $V_R = 1V, f = 1MHz$	$C_J$			10	pF
Reverse recovery time @ $I_F = 10mA, I_R = 10mA, I_R = 1mA$	$t_{rr}$			5	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			430 <sup>1)</sup>	$^\circ C/W$

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature



### Characteristics ( $T_j = 25^\circ\text{C}$ unless otherwise specified)

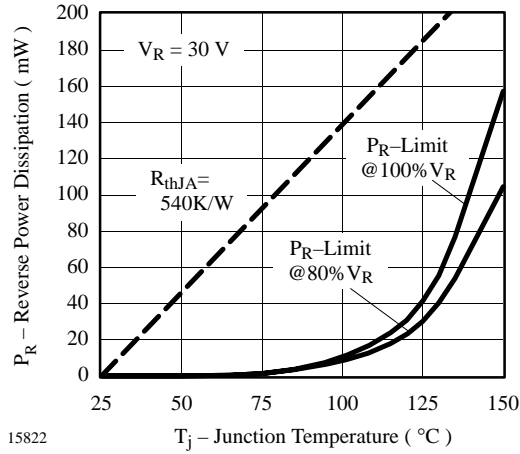


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

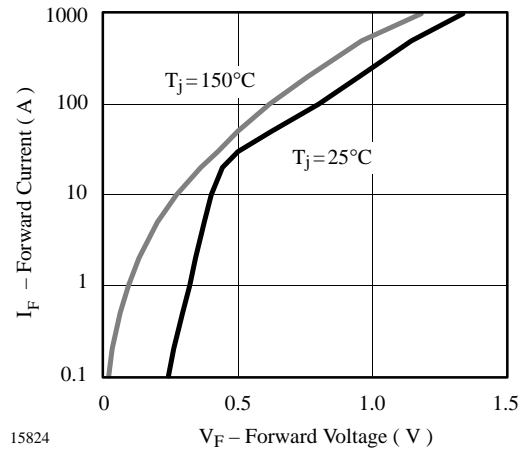


Figure 3. Forward Current vs. Forward Voltage

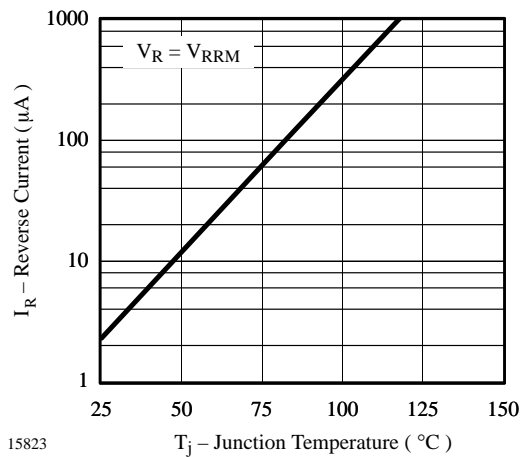


Figure 2. Reverse Current vs. Junction Temperature

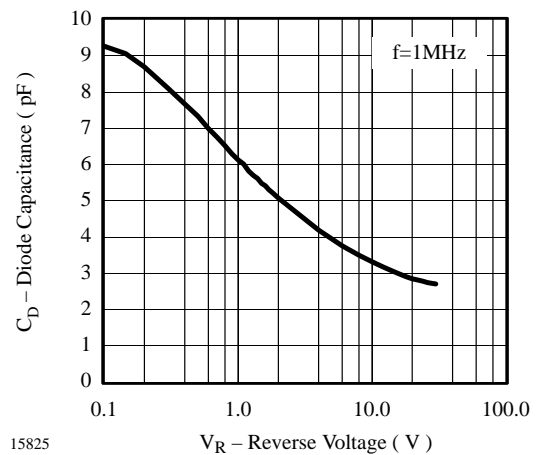


Figure 4. Diode Capacitance vs. Reverse Voltage

Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
minimelf	2500pcs	7inch	20000pcs	186×186×105	120,000pcs	443×215×305