



High-voltage switching diode

Features

1. Small surface mounting type
2. High reliability
3. $V_{RM}=250V$



Applications

High voltage switch and general purpose rectification

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

$T_j=25\text{ }^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Peak reverse voltage			V_{RM}	250	V
DC reverse voltage			V_R	220	V
Surge current	$t_p=1s$		I_{Surge}	1	A
Mean rectifying current			I_O	200	mA
Peak forward current			I_{FM}	625	mA
Power dissipation			P	300	mW
Junction temperature			T_j	175	$^{\circ}\text{C}$
Storage temperature range			T_{stg}	-65~+175	$^{\circ}\text{C}$

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

Excel Semiconductor



Electrical Characteristics

 $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 200\text{mA}$		V_F		1.13	1.5	V
Reverse current	$V_R = 220\text{V}$		I_R		0.05	10	μA
Diode capacitance	$V_R = 0, f = 1\text{MHz}$		C_D			3	pF
Reverse recovery time	$I_F = I_R = 20\text{mA}, R_L = 50\Omega$		t_{rr}			75	ns

Characteristics ($T_a = 25^\circ\text{C}$

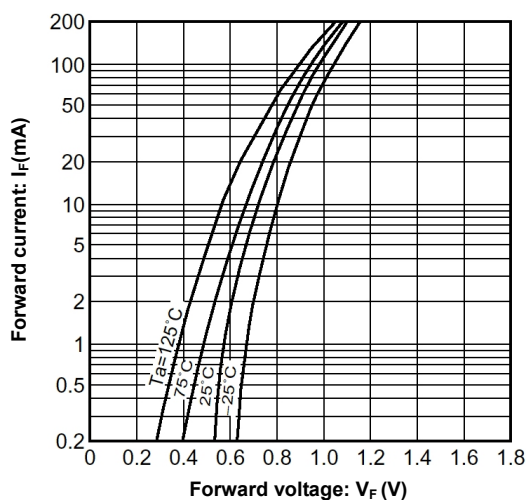
 $^\circ\text{C}$ unless specified otherwise)

Figure 1. Forward characteristics

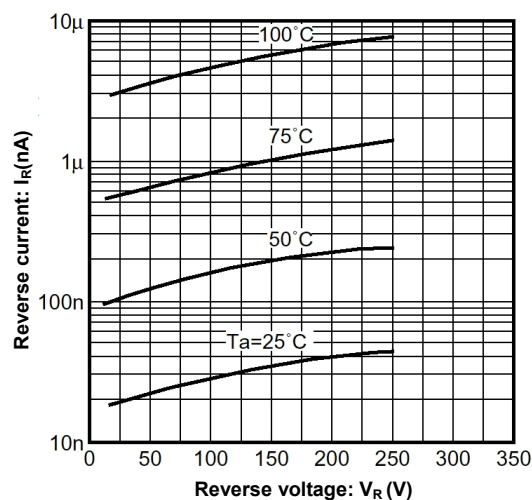


Figure 2. Reverse characteristics

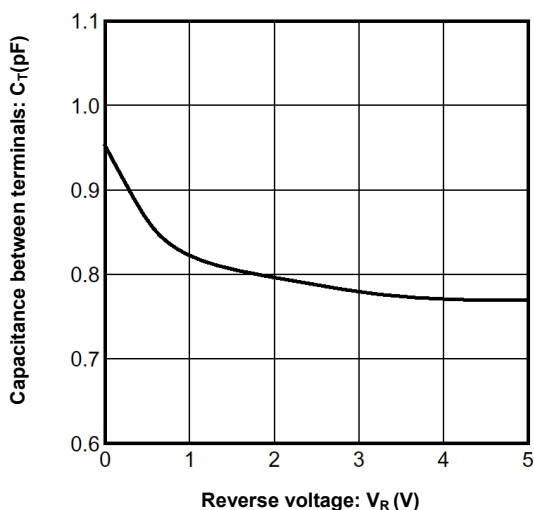


Figure 3. Capacitance between terminals characteristics

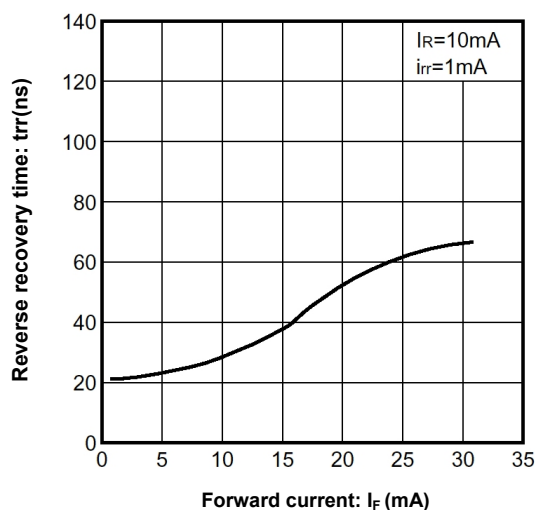


Figure 4. Reverse recovery time characteristics

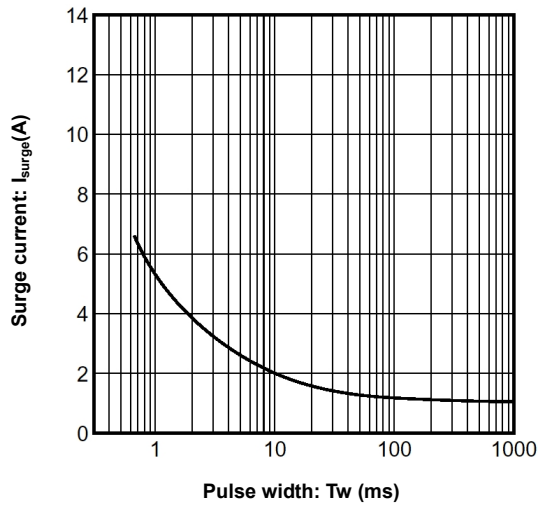


Figure 5. Surge current characteristics

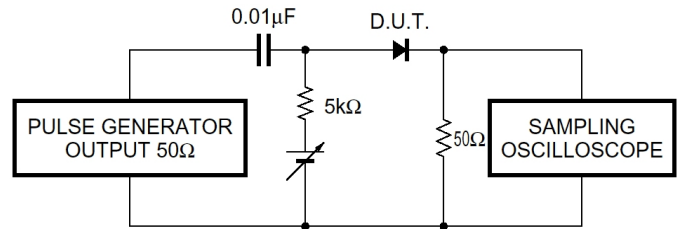
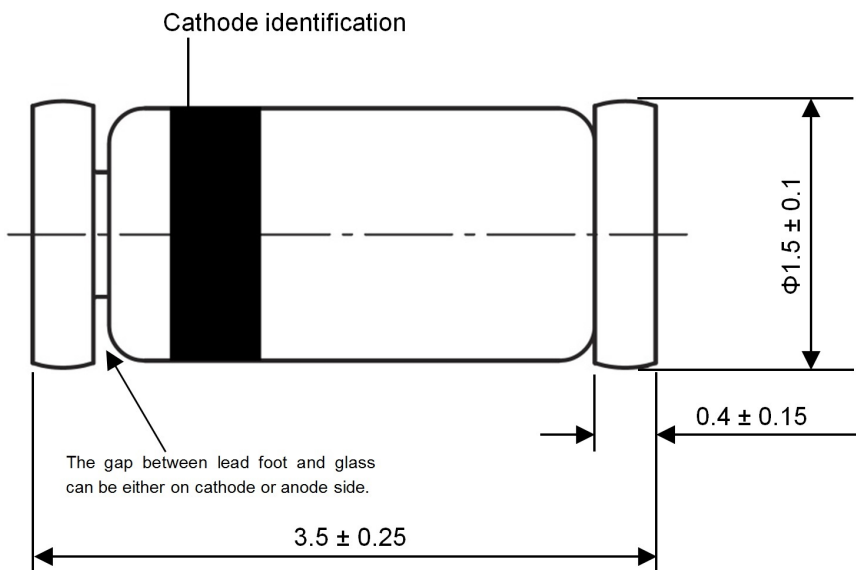


Figure 6. Reverse recovery time (t_{rr}) measurement circuit

Dimensions in mm



Glass Case
Mini Melf / SOD-80
JEDEC DO-213 AA

Excel Semiconductor