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℃

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	℃
Storage temperature range			T_{stg}	-65~+175	℃

Maximum Thermal Resistance

T_j=25℃

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm×50mm×1.6mm	R_{thJA}	500	K/W

Electrical Characteristics

T_j=25℃

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

Characteristics (Ta=25℃ unless specified otherwise)

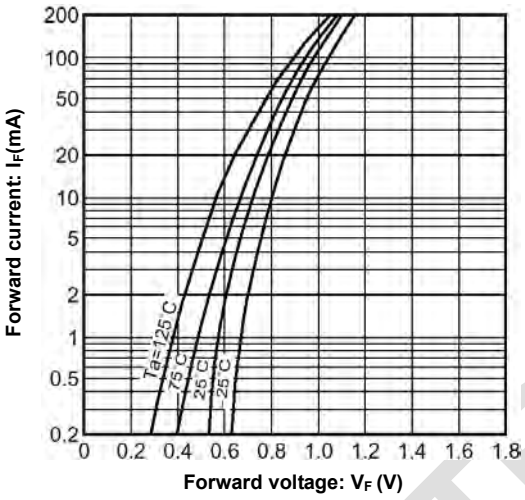


Figure 1. Forward characteristics

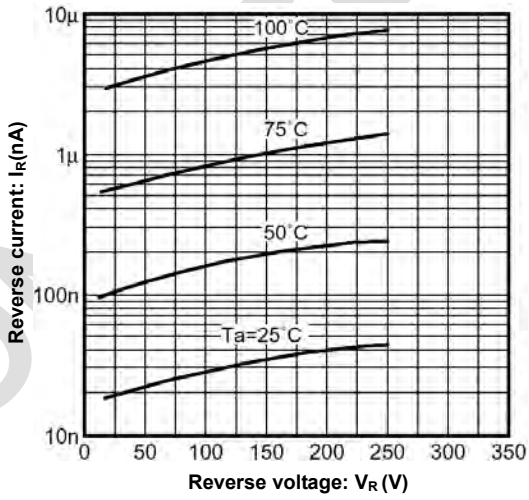


Figure 2. Reverse characteristics

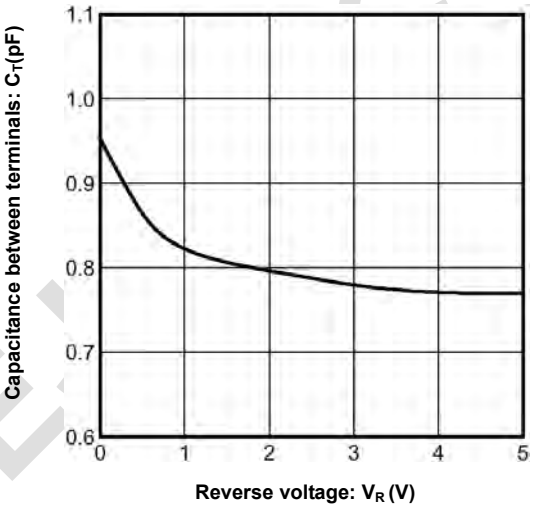


Figure 3. Capacitance between terminals characteristics

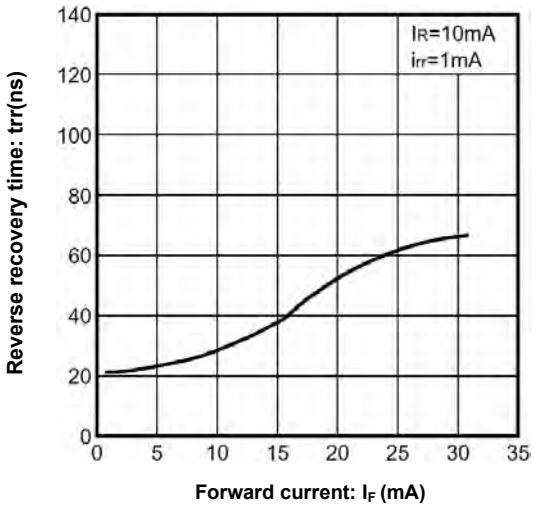


Figure 4. Reverse recovery time characteristics

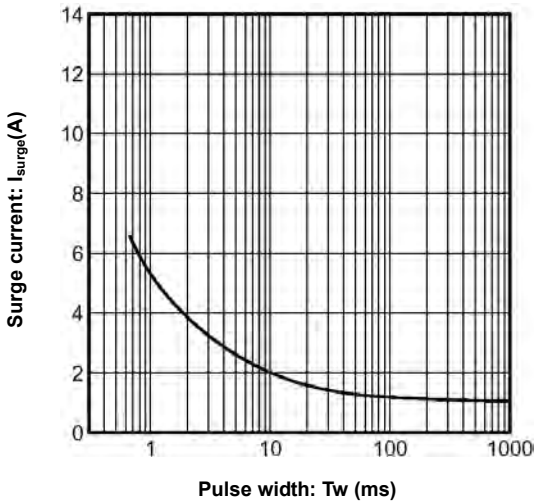


Figure 5. Surge current characteristics

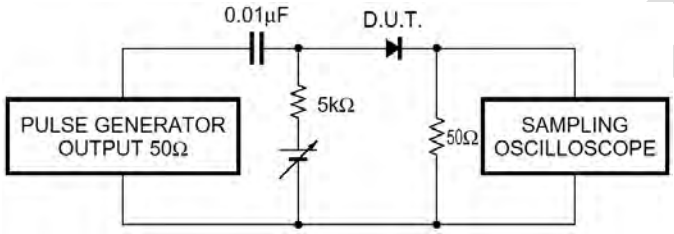
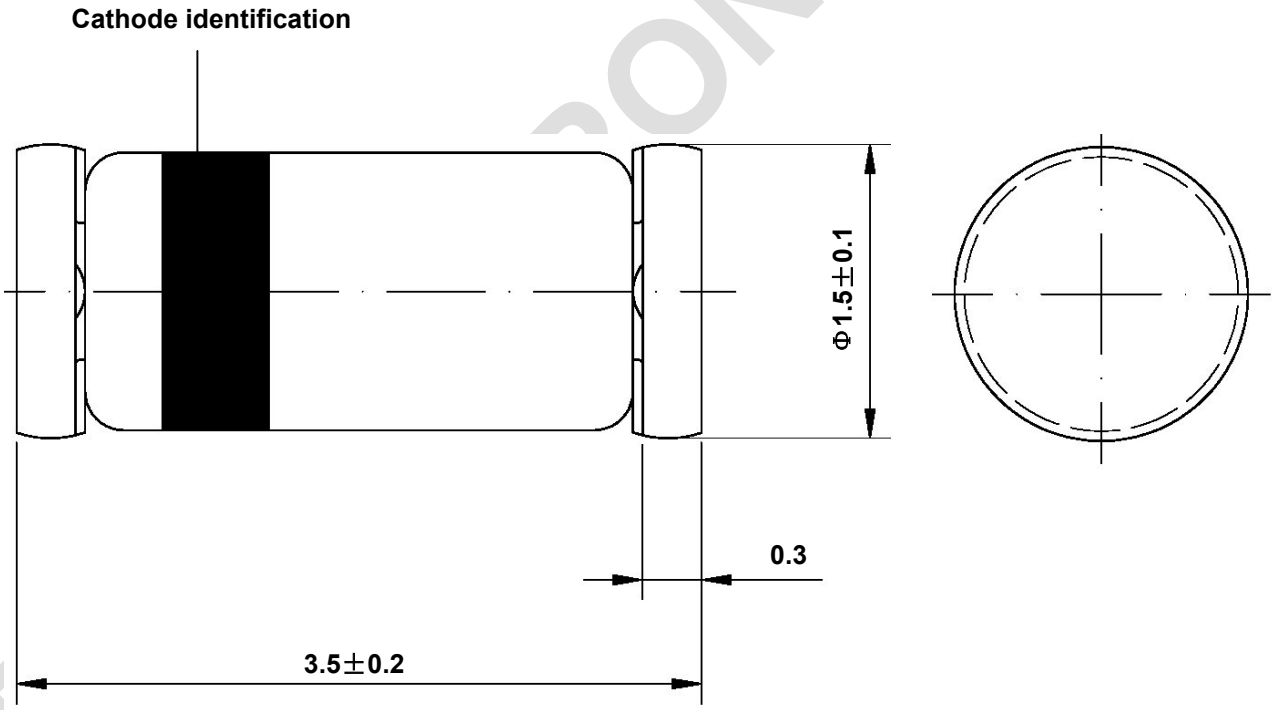


Figure 6. Reverse recovery time (trr) measurement circuit

Dimensions in mm



Glass Case
Mini Melf / SOD 80
JEDEC DO 213 A