



High-speed switching diode

Features

1. Small surface mounting type, fits onto SOD 323/SOT 23 footprints
2. High Speed
3. High reliability with high surge current handing capability



Applications

High speed switching

Absolute Maximum Ratings

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

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	225	mA
Mean rectifying current	I_o	100	mA
Surge current (1s)	I_{surge}	500	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~+125	$^\circ\text{C}$

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.

Electrical Characteristics

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.94	1.2	V	$I_F=100\text{mA}$
Reverse current	I_R	-	0.03	0.1	μA	$V_R=80\text{V}$
Capacitance between terminals	C_T	-	0.72	3.0	pF	$V_R=0.5\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}	-	1.2	4.0	ns	$V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$

Excel Semiconductor



Characteristics (Ta=25

°C unless specified otherwise)

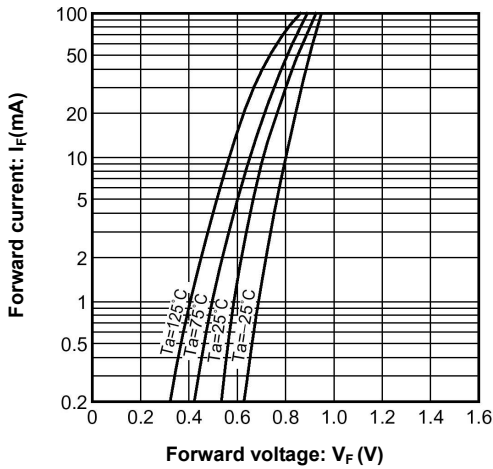


Figure 1. Forward characteristics

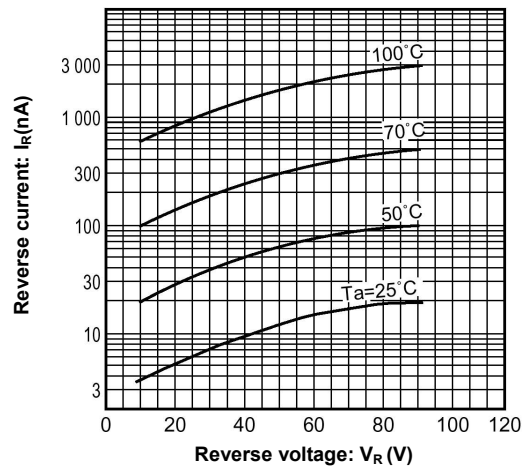


Figure 2. Reverse characteristics

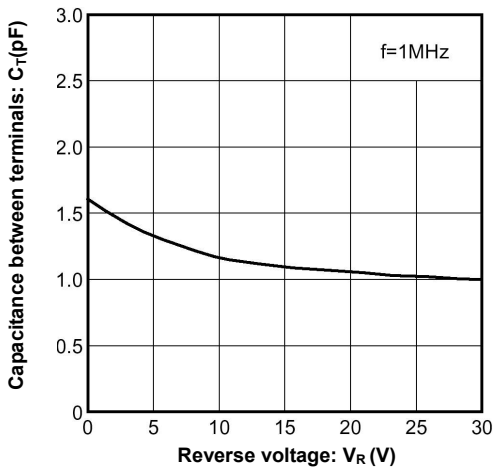


Figure 3. Capacitance between terminals characteristics

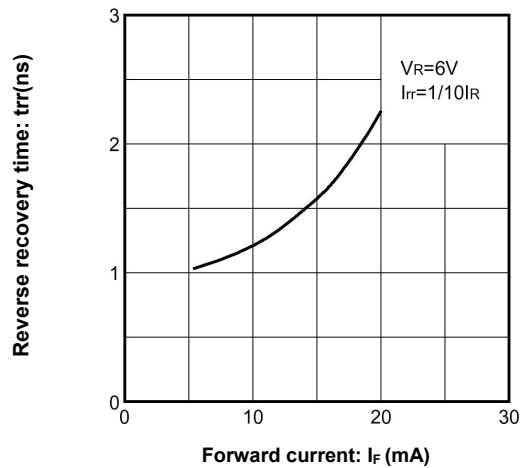


Figure 4. Reverse recovery time characteristics

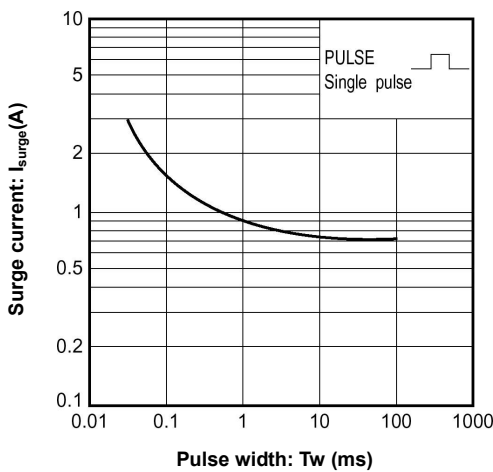


Figure 5. Surge current characteristics

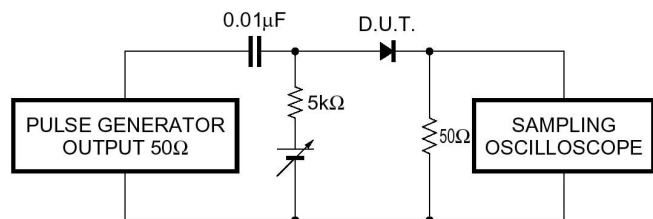
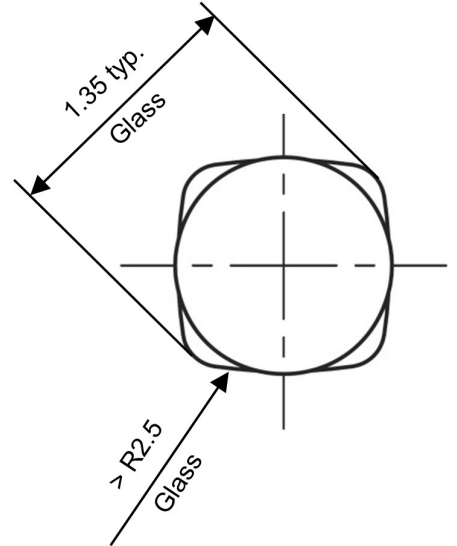
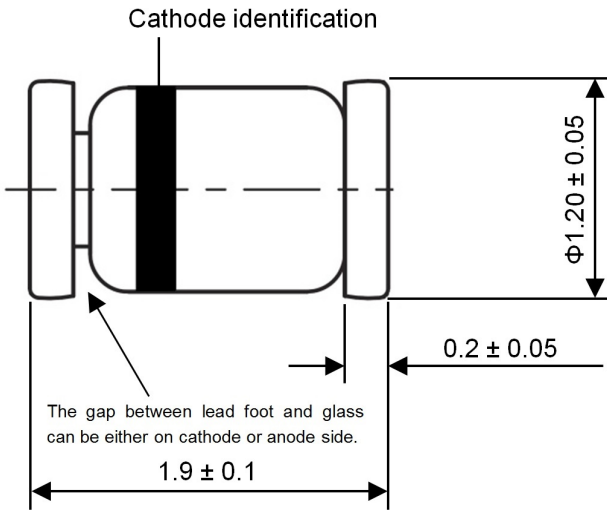


Figure 6. Reverse recovery time (trr) measurement circuit



Dimensions in mm



Glass Case
Micro Melf