

MCL-SS400

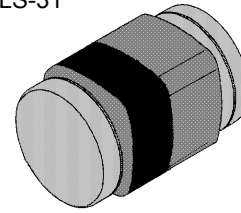
Silicon Epitaxial Planar Switching Diode

High-speed switching applications

Features

- Fits onto SOD-323 / SOT-23 footprints
- High reliability

LS-31



Glass Case MicroMELF

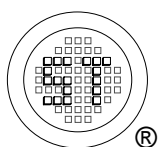
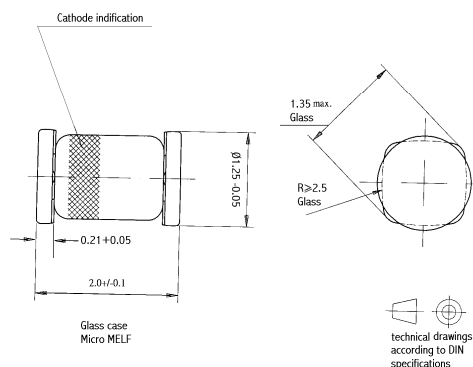
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	I_{FM}	225	mA
Surge Forward Current (1 s)	I_{FSM}	500	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

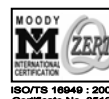
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1.2	V
Reverse Current at $V_R = 80\text{ V}$	I_R	0.1	μA
Diode Capacitance at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$	C_d	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$	t_{rr}	4	ns

Dimensions in mm



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 15/06/2009

ELECTRICAL CHARACTERISTIC CURVES (Ta=25°C)

Fig. 1- FORWARD CHARACTERISTICS

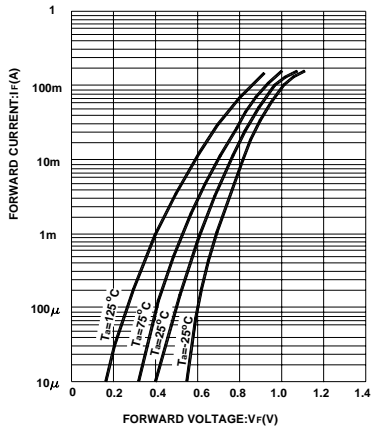


Fig. 2- REVERSE CHARACTERISTICS

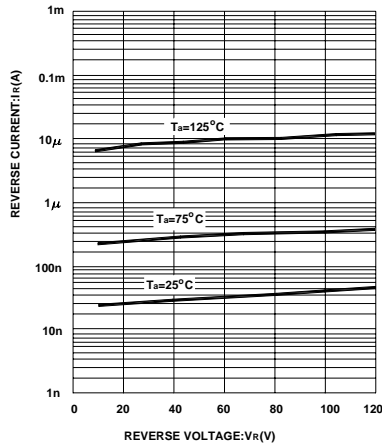


Fig. 3- CAPACITANCE BETWEEN TERMINALS

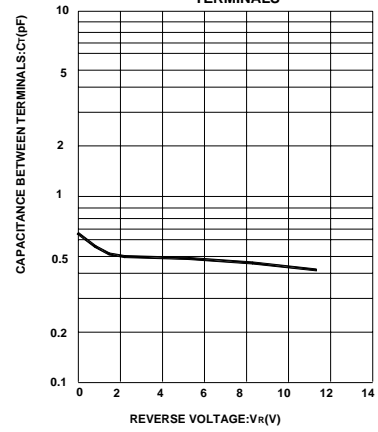


Fig. 4- REVERSE RECOVERY TIME CHARACTERISTICS

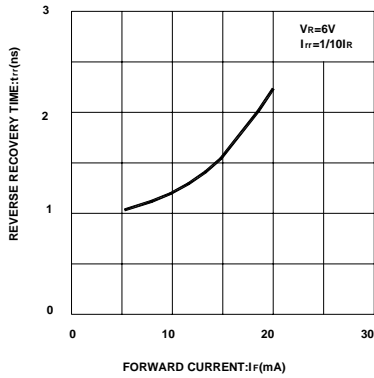


Fig. 5- SURGE CURRENT CHARACTERISTICS

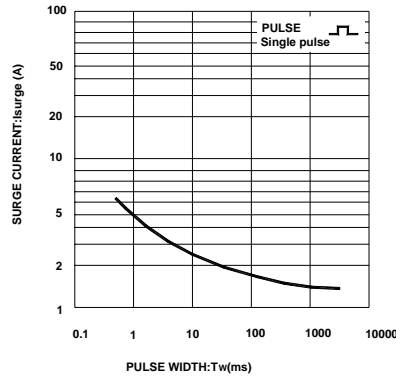
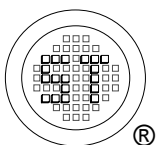
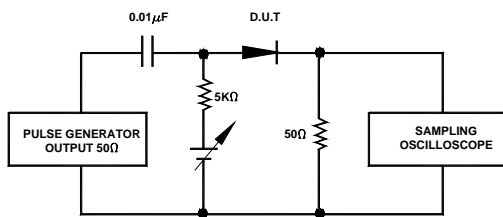


Fig. 6- REVERSE RECOVERY TIME (t_{rr}) MEASUREMENT CIRCUIT



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