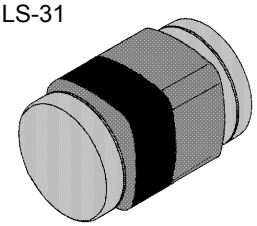
MCL400

Silicon Epitaxial Planar Switching Diode

High-speed switching applications

LS-31



Glass Case MicroMELF

Features

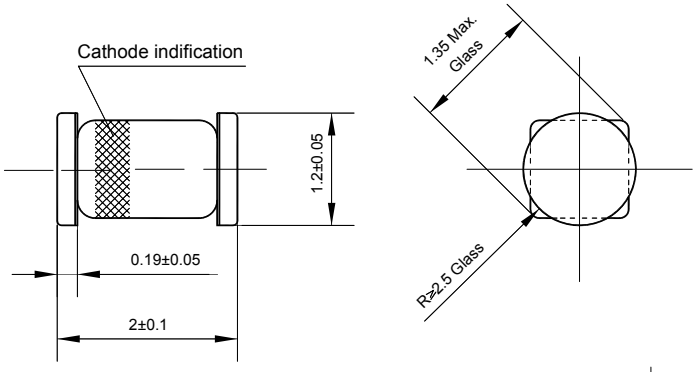
- Fits onto SOD-323 / SOT-23 footprints
- High reliability

Absolute Maximum Ratings (T_a = 25 °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	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

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



Glass case MicroMELF
Dimensions in mm

technical drawings according to DIN specifications

ELECTRICAL CHARACTERISTIC CURVES (T_a=25°C)

Fig. 1- FORWARD CHARACTERISTICS

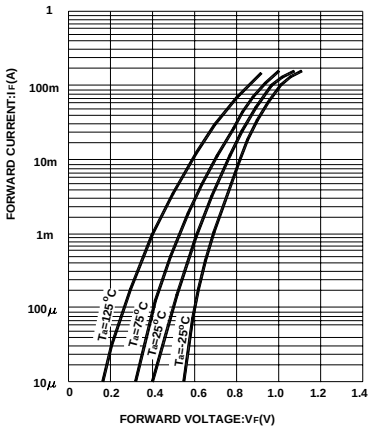


Fig. 2- REVERSE CHARACTERISTICS

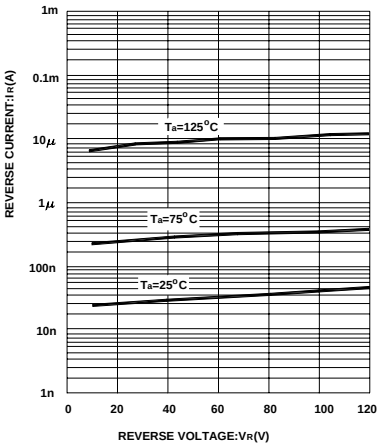


Fig. 3- CAPACITANCE BETWEEN TERMINALS

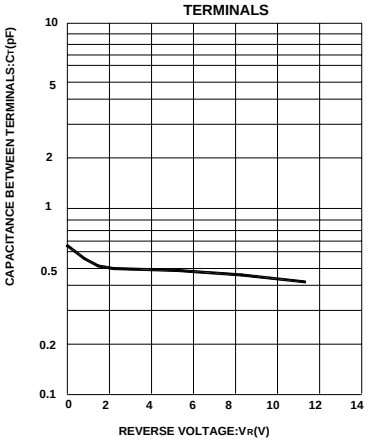


Fig. 4- REVERSE RECOVERY TIME CHARACTERISTICS

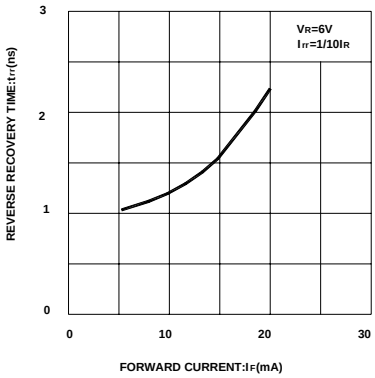


Fig. 5- SURGE CURRENT CHARACTERISTICS

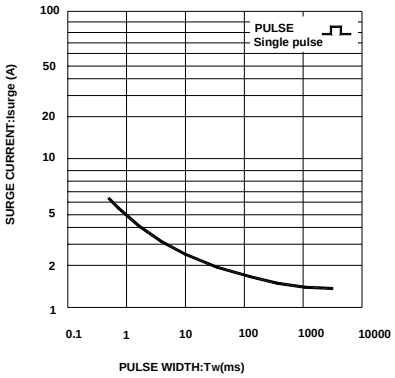


Fig. 6-REVERSE RECOVERY TIME(t_{rr}) MEASUREMENT CIRCUIT