

# MCL355

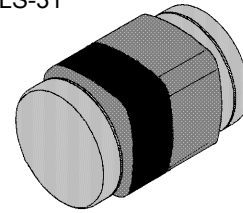
## Silicon Epitaxial Planar Switching Diode

High-speed switching applications

### Features

- Fits onto SOD-323 / SOT-23 footprints
- High reliability with high surge current handling capability.

LS-31



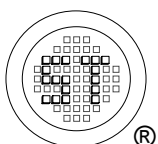
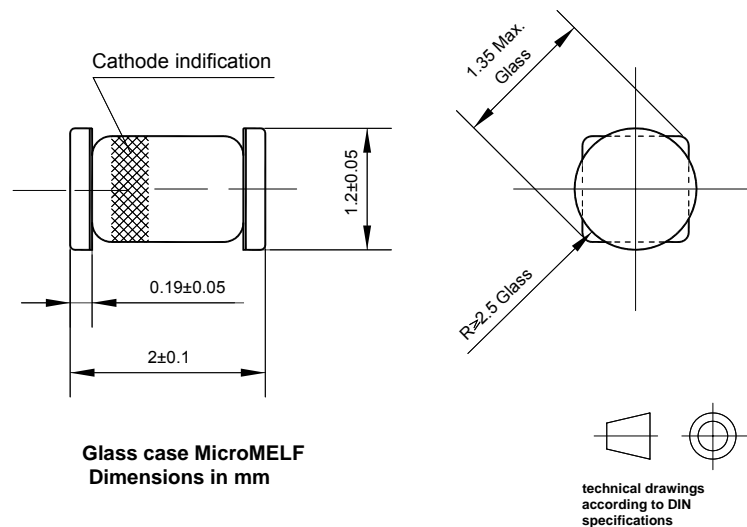
Glass Case MicroMELF

### 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
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	$\mu\text{A}$
Diode Capacitance at $V_R = 0.5\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\ \Omega$	$t_{rr}$	4	ns



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## ELECTRICAL CHARACTERISTIC CURVES (T<sub>a</sub>=25°C)

Fig. 1- FORWARD CHARACTERISTICS

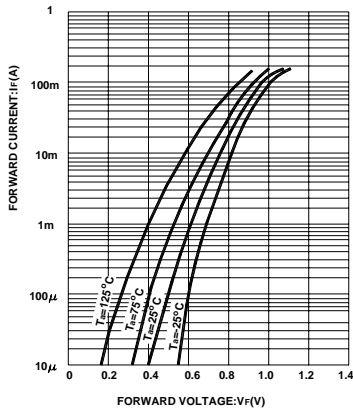


Fig. 2- REVERSE CHARACTERISTICS

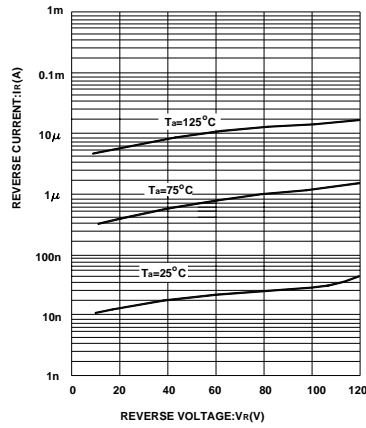


Fig. 3- CAPACITANCE BETWEEN TERMINALS CHARACTERISTICS

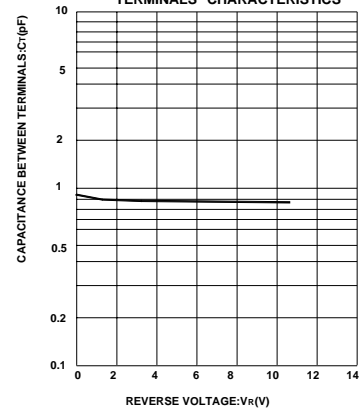


Fig. 4- REVERSE RECOVERY TIME CHARACTERISTICS

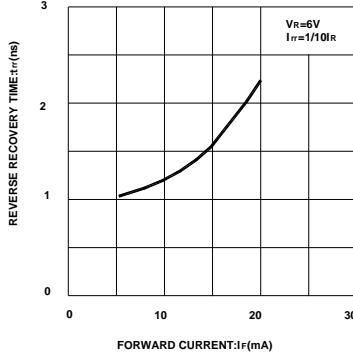


Fig. 5- SURGE CURRENT CHARACTERISTICS

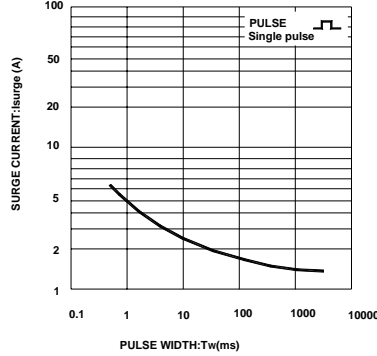


Fig. 6- REVERSE RECOVERY TIME (t<sub>rr</sub>) MEASUREMENT CIRCUIT

