

# MCL80G

## Silicon Epitaxial Planar Switching Diode

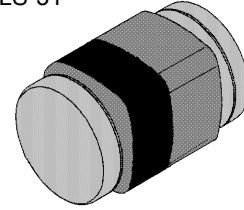
### Features

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

### Applications

- Ultra high speed switching

LS-31



Glass Case MicroMELF

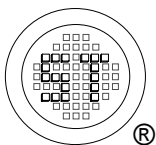
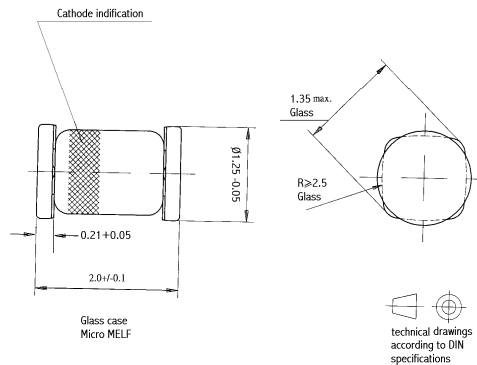
### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	80	V
Reverse Voltage	$V_R$	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	$I_{FM}$	300	mA
Surge Forward Current (1 $\mu\text{s}$ )	$I_{FSM}$	4	A
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 $T_a = 25\text{ }^\circ\text{C}$

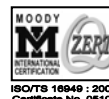
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	1.2	V
Reverse Leakage Current at $V_R = 70\text{ V}$	$I_R$	0.1	$\mu\text{A}$
Diode Capacitance at $V_R = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_d$	3.5	pF
Reverse Recovery Time at $I_F = 5\text{ mA}$ , $V_R = 6\text{ V}$	$t_{rr}$	4	ns

Dimensions in mm



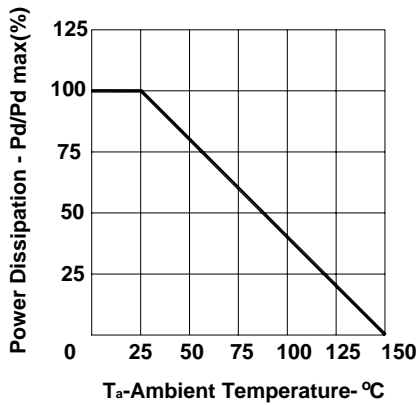
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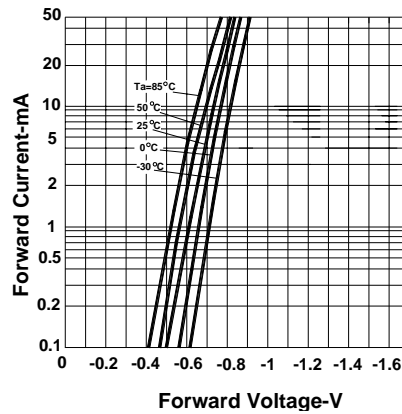


Dated : 15/06/2009

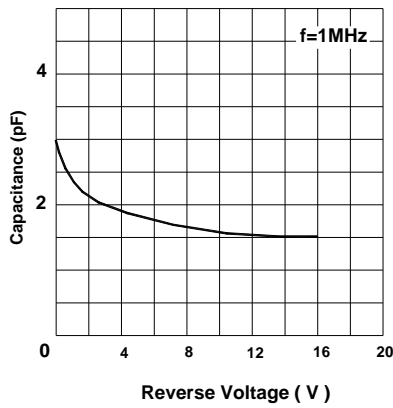
**Power Attenuation Curve**



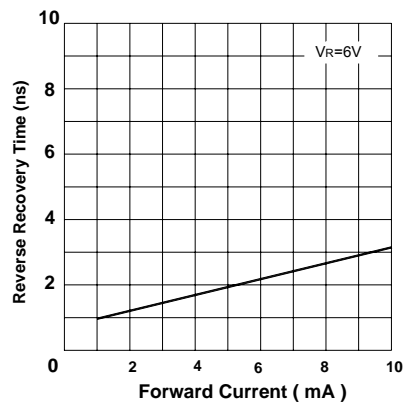
**Forward Characteristics**



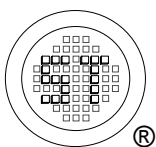
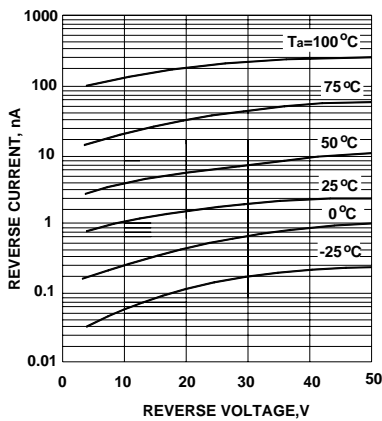
**Capacitance**



**Reverse Recovery Time**



**REVERSE CHARACTERISTICS**



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