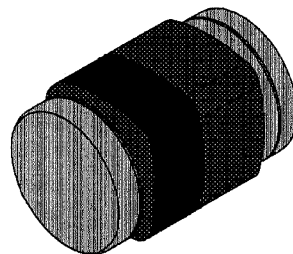


# MCL245

## SILICON EPITAXIAL PLANAR DIODE

### Features

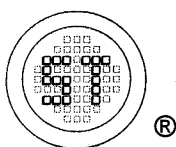
- Fast switching diode
- Fits onto SOD 323 / SOT 23 footprints
- Micro Melf package



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

	Symbol	Value	Unit
Reverse Voltage	$V_R$	220	V
Peak Reverse Voltage	$V_{RM}$	250	V
Mean Rectified Current Half Wave Rectification with Resistance load at $T_{amb} = 25^\circ\text{C}$ and $f/50\text{ Hz}$	$I_O$	200	mA
Maximum Forward Current	$I_{FM}$	625	mA
Surge Forward Current at $t < 1\text{s}$ and $T_j = 25^\circ\text{C}$	$I_{FSM}$	1000	mA
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-65 to +175	$^\circ\text{C}$

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature



**SEMTECH ELECTRONICS LTD.** ( Wholly owned subsidiary of Honey Technology Ltd.)



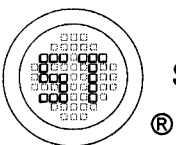
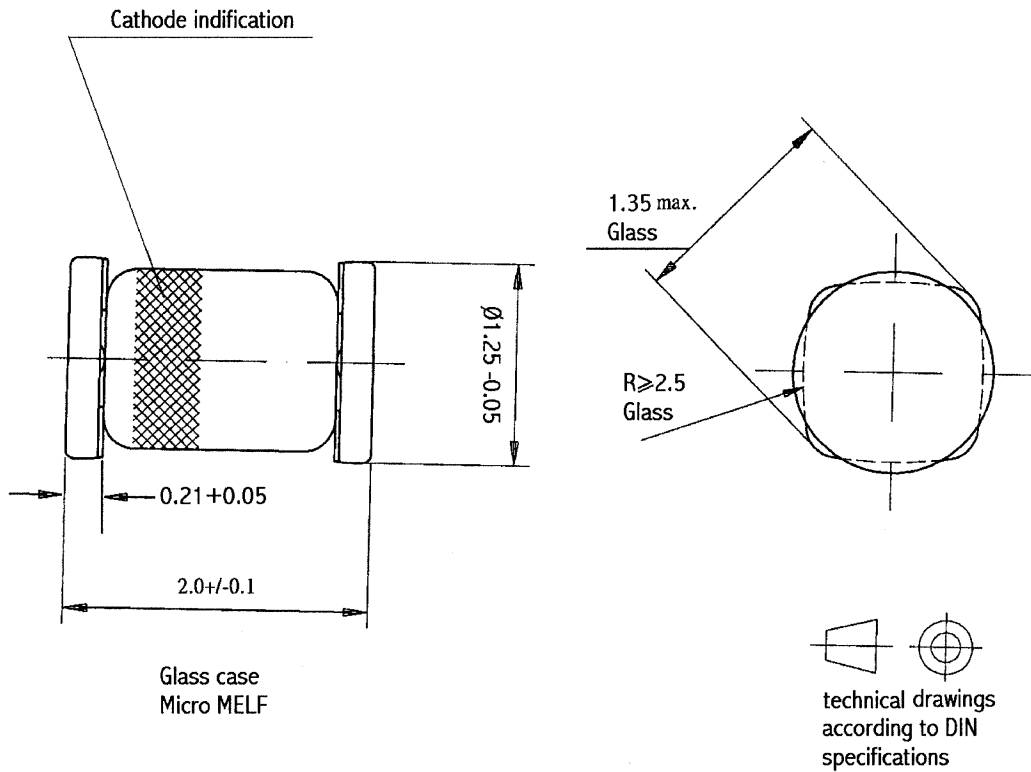
Dated : 20/08/2002

# MCL245

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

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F=200\text{mA}$	$V_F$	-	-	1.5	V
Leakage Current at $V_R=220\text{V}$	$I_R$	-	-	10	$\mu\text{A}$
Reverse Breakdown Voltage tested with 100 $\mu\text{A}$ Pulses	$V_{BR}$	250	-	-	V
Capacitance at $V_F=V_R=0$ , $f=1\text{MHz}$	$C_{tot}$	-	-	3	pF
Reverse Recovery Time From $I_F=I_R=20\text{mA}$	$t_{rr}$	-	-	75	ns

## Dimensions in mm



**SEMTECH ELECTRONICS LTD.** ( Wholly owned subsidiary of Honey Technology Ltd.)

