

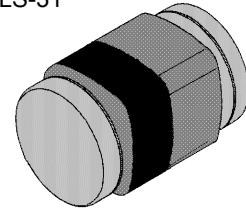
MCL914, MCL914A, MCL914B

Silicon Epitaxial Planar Switching Diode

Features

- Saving space
- Hermetic sealed parts
- Fits onto SOD-323 / SOT-23 footprints

LS-31



Glass Case MicroMELF

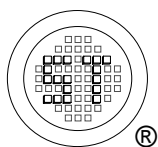
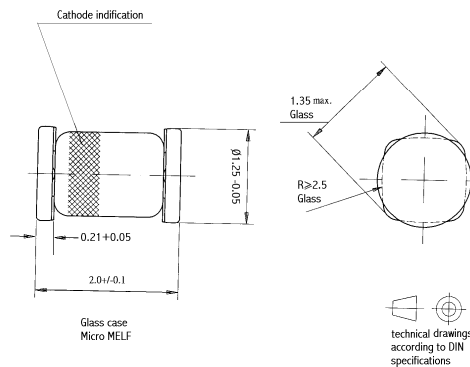
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	75 200	mA
Forward Continuous Current	I_{FM}	150 300	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1 1 4	A
		at $t = 1\text{ s}$ MCL914 MCL914A / B at $t = 1\text{ }\mu\text{s}$	
Power Dissipation	P_{tot}	500	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 175	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage	V_F	0.62	0.72	V
at $I_F = 5\text{ mA}$	MCL914B	-	1	
at $I_F = 100\text{ mA}$	MCL914B	-	1	
at $I_F = 10\text{ mA}$	MCL914	-	1	
at $I_F = 20\text{ mA}$	MCL914A	-	1	
Reverse Current	I_R	-	25	nA
at $V_R = 20\text{ V}$		-	5	μA
at $V_R = 75\text{ V}$		-	50	μA
at $V_R = 20\text{ V}, T_j = 150\text{ }^\circ\text{C}$				
Diode Capacitance	C_j	-	4	pF
at $V_R = 0, f = 1\text{ MHz}$				
Reverse Recovery Time	t_{rr}	-	4	ns
at $I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}, V_R = 6\text{ V}, R_L = 100\text{ }\Omega$				

Dimensions in mm



SEMTECH ELECTRONICS LTD.

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