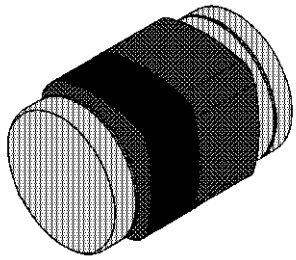
MCL101A…MCL101C

SILICON SCHOTTKY BARRIER DIODES

for general purpose applications LS-31



Features

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

Absolute Maximum Ratings (T_a = 25 ^{O}C)

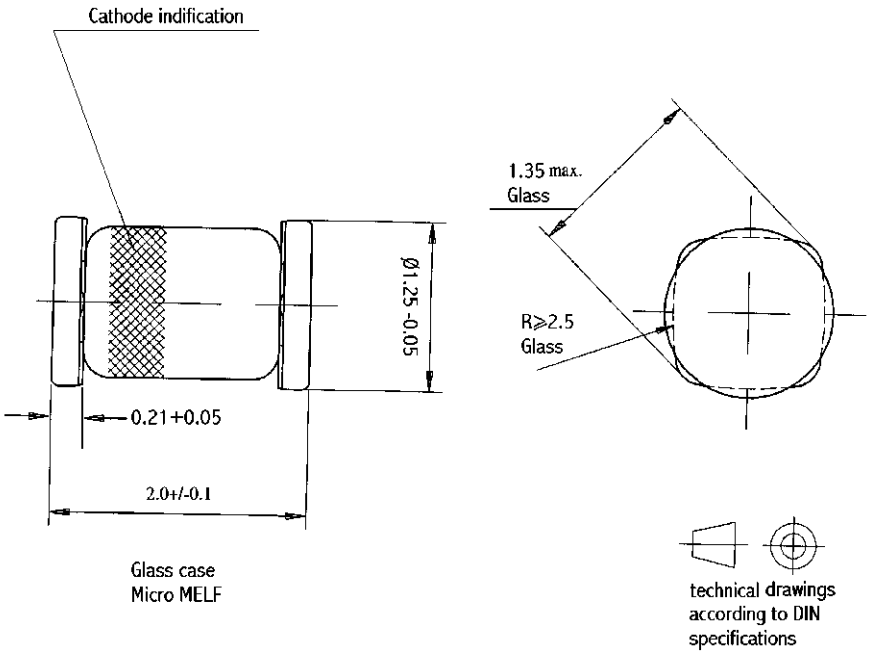
		Symbol	Value	Unit
Peak Reverse Voltage	MCL101A	V_{RRM}	60	V
	MCL101B	V_{RRM}	50	V
	MCL101C	V_{RRM}	40	V
Power Dissipation at T_{amb} = 25 ^{O}C		P_{tot}	400	mW
Max. Single Cycle Surge 10 s Squarewave		I_{FSM}	2	A
Junction Temperature		T_j	200	^{O}C
Storage Temperature Range		T_S	- 55 to + 200	^{O}C

MCL101A…MCL101C

Characteristics at T_{amb} = 25 °C

		Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage						
at I_R = 10 uA	MCL101A	$V_{(BR)R}$	60	-	-	V
	MCL101B	$V_{(BR)R}$	50	-	-	V
	MCL101C	$V_{(BR)R}$	40	-	-	V
Leakage Current						
at V_R = 50 V	MCL101A	I_R	-	-	200	nA
at V_R = 40 V	MCL101B	I_R	-	-	200	nA
at V_R = 30 V	MCL101C	I_R	-	-	200	nA
Forward Voltage Drop						
at I_F = 1 mA	MCL101A	V_F	-	-	0.41	V
	MCL101B	V_F	-	-	0.4	V
	MCL101C	V_F	-	-	0.39	V
at I_F = 15 mA	MCL101A	V_F	-	-	1	V
	MCL101B	V_F	-	-	0.95	V
	MCL101C	V_F	-	-	0.9	V
Junction Capacitance						
at V_R = 0 V, f = 1 MH_Z	MCL101A	C_{tot}	-	-	2	pF
	MCL101B	C_{tot}	-	-	2.1	pF
	MCL101C	C_{tot}	-	-	2.2	pF
Reverse Recovery Time						
at I_F = I_R = 5 mA, recover to 0.1 I_R		t_{rr}	-	-	1	ns

Dimensions in mm



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, acompany listed on the Hong Kong Stock Exchange, Stock Code: 724)

ISO/TS 16949 : 2002 Certificate No. 05103

ISO 14001 Certificate No. 7116

ISO 9001 : 2000

Dated : 20/08/2002