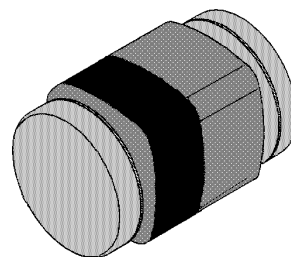


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SILICON EPITAXIAL PLANAR DIODE

LS-31



Features

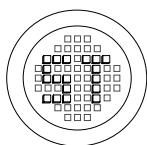
- High speed
- High reliability
- Fits onto SOD 323 / SOT 23 footprints
- Micro Melf package

Applications

Ultra high speed switching

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

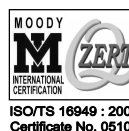
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	80	V
DC Reverse Voltage	V_R	80	V
Peak Forward Current	I_{FM}	300	mA
Mean Rectifying Current	I_O	100	mA
Surge Current(1 μ S)	I_{surge}	4	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55 ... +150	$^{\circ}\text{C}$



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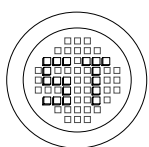
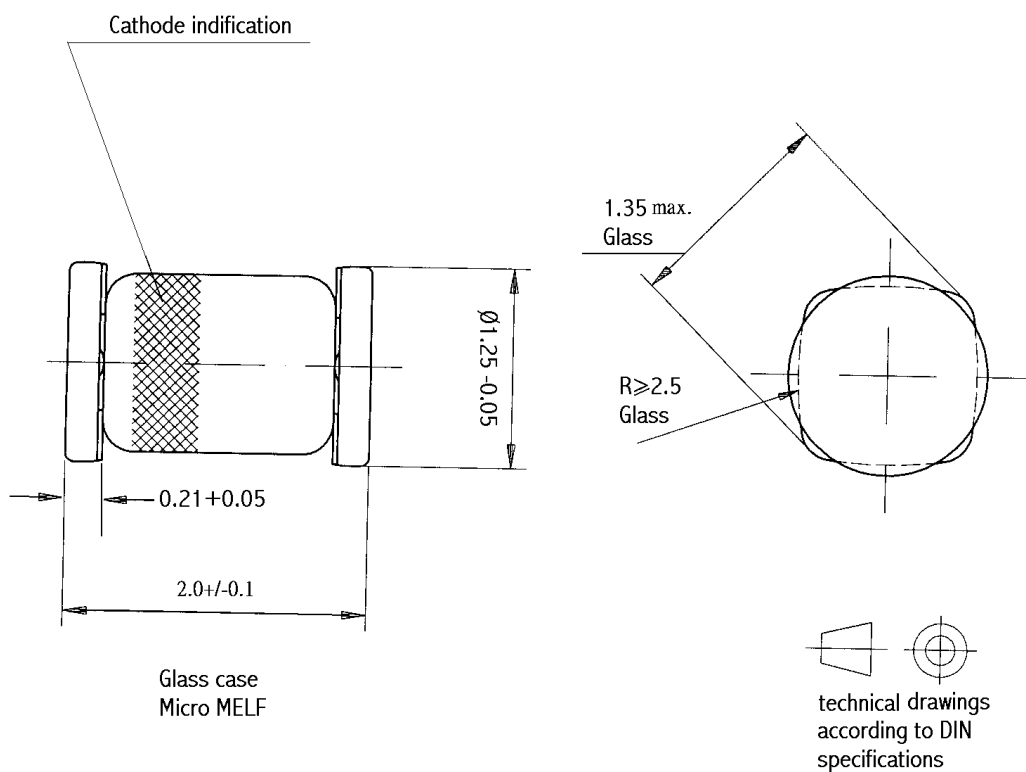
Dated : 09/04/2003

MCL80G

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

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	$I_F = 100\text{mA}$	V_F	-	-	1.2	V
Reverse Current	$V_R = 70\text{V}$	I_R	-	-	0.1	μA
Diode Capacitance	$V_R = 6\text{V}$, $f = 1\text{MHz}$	C_D	-	-	3.5	pF
Reverse Recovery Time	$I_F = 5\text{mA}$, $V_R = 6\text{V}$	t_{rr}	-	-	4	ns

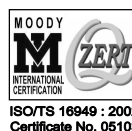
Dimensions in mm



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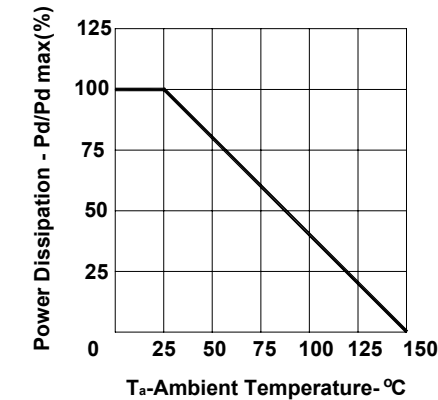
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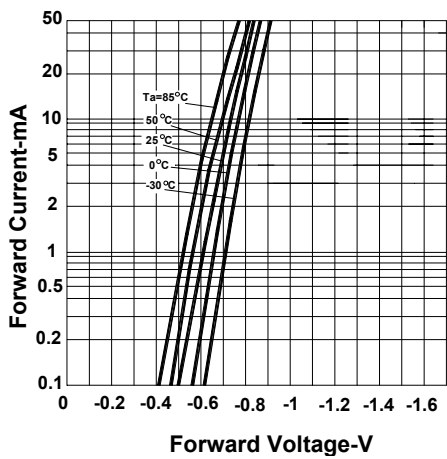
Dated : 09/04/2003

MCL80G

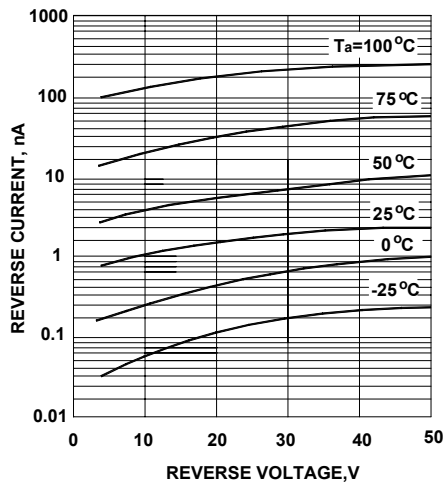
Power Attenuation Curve



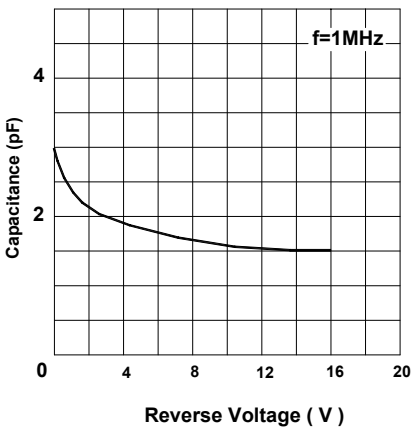
Forward Characteristics



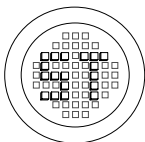
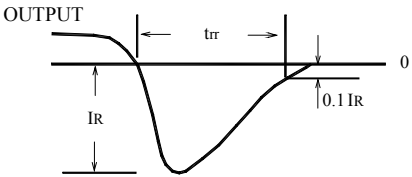
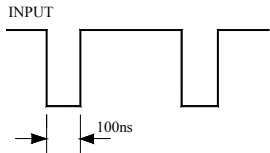
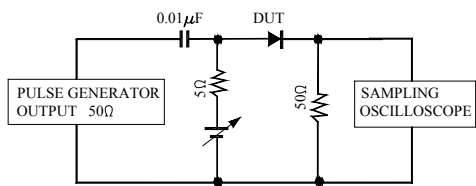
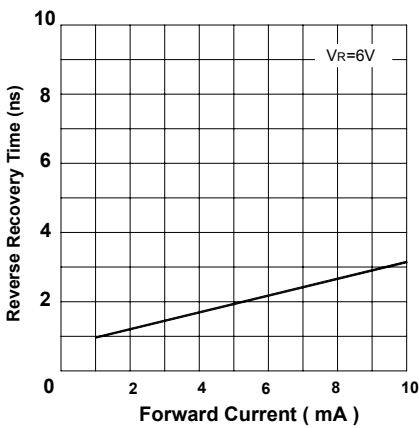
REVERSE CHARACTERISTICS



Capacitance



Reverse Recovery Time



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