

DESCRIPTION

These silicon switching diodes are available in DO-35 glass packages and LL4938 Mini-Melf (DO-213AA).

These devices are used in general-purpose applications where high voltage and switching speed are important.

When ordering Mil-PRF-19500/169 parts, use the number with the appropriate 1N4938-1 JAN, JTX or JTXV prefix.

KEY FEATURES

- metallurgical bonded.
- available up to JANTXV for 1N4938-1 axial devices & 1N4938UR-1 MINI-MELF.

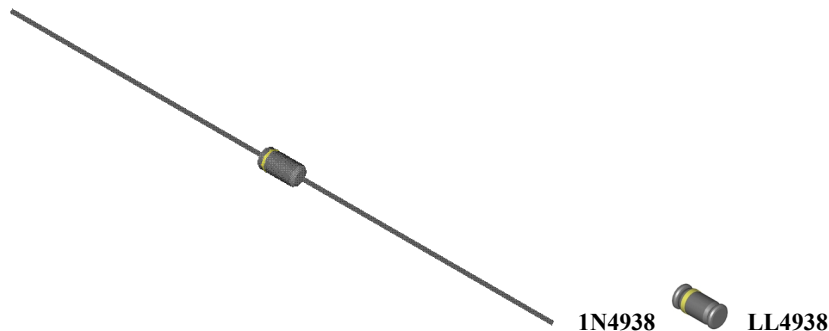
IMPORTANT: For the most current data, consult MICROSEMI's website: <http://www.microsemi.com>

**ABSOLUTE MAXIMUM RATINGS AT 25° C
(UNLESS OTHERWISE SPECIFIED)**

Rating	Symbol	Value	Unit
Peak Inverse Voltage@ 100 μ A	PIV	200(Min.)	Volts
Average Rectified Current	I _A vg	100	mAmps
Continuous Forward Current	I _F dc	100	mAmps
Peak Surge Current (t _{peak} = 1 μ sec.)	I _{peak}	1.0	Amp
Power Dissipation T _L = 50°C, L = 3/8" from body	P _{tot}	500	mWatts
Storage Temperature Range	T _{S t}	-65 to +200	°C
Operating Temperature	T _{Op}	-65 to +175	°C

APPLICATIONS/BENEFITS

- High Voltage and Switching Speed.

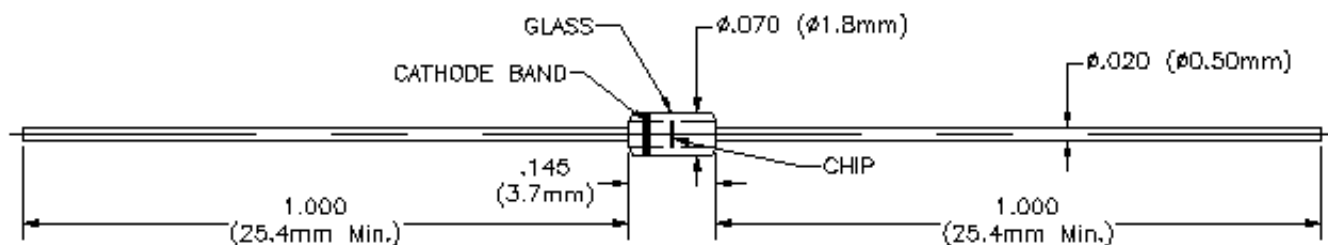


ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)

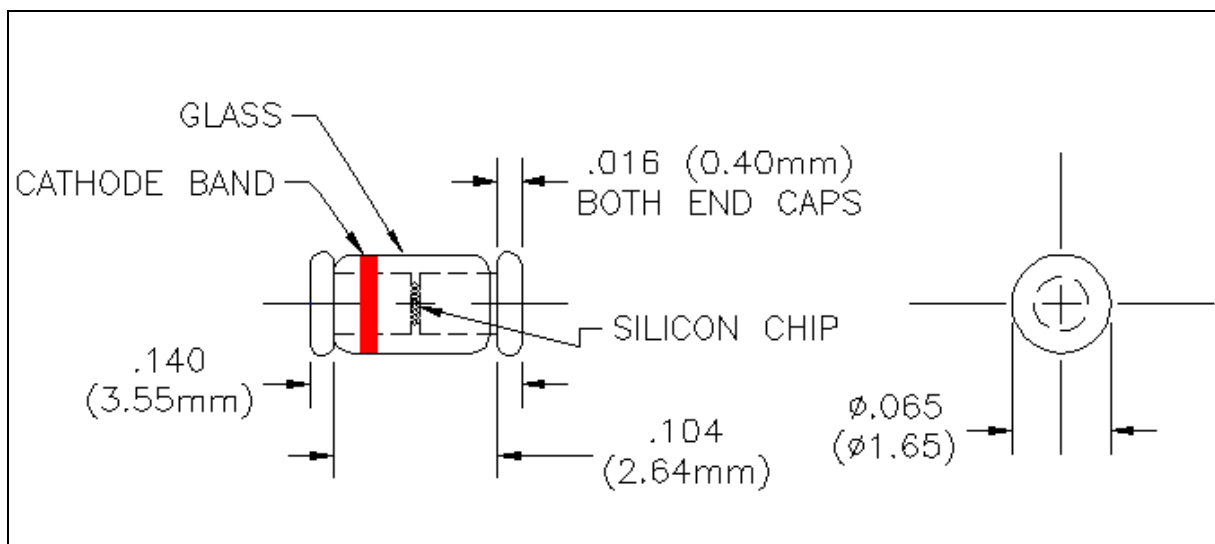
Parameter	Symbol	Conditions	Min	Max	Units
Forward Voltage Drop	V_F	$I_F = 100\text{mA}$		1.0	V
Reverse Leakage Current @150°C	I_R	$V_R = 175\text{ V}$		100	μA
Reverse Leakage Current	I_R	$V_R = 175\text{ V}$		100	nA
Capacitance	C_T	$V_R = 0\text{ V}, F = 1\text{ MHz}$		5.0	pF
Reverse Recovery Time	T_{rr}	(See note 1)		50	ns

Note 1: Per Method 4031-B with $I_F = I_R = 30\text{ ma}$, $R_L = 100\text{ Ohms}$, $C = 3\text{ Pf}$

PRODUCT PRELIMINARY DATA – Information contained in this document is pre-production data, and is proprietary to Microsemi Corp. It may not be modified in any way without the express written consent of Microsemi Corp. Product referred to herein is not guaranteed to achieve preliminary or production status and product specifications, configurations, and availability may change at any time.



1N4938 DO-35 Glass Package
(nominal dimensions)



LL4938 LL-34/35 MINI-MELF
SMD Package (DO-213AA)
(nominal dimensions)

NOTES: