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**MLL746A,-1 thru MLL759A,-1
and
MLL4370A,-1 thru MLL4372A,-1
±1% and ±2% Versions
"C" and "D" Available**

Features

- Leadless Package For Surface Mount Technology
- Ideal For High Density Mounting
- Voltage Range 2.4 To 12 Volts
- Hermetically Sealed, Double Slug Glass Construction
- Metallurgically Bonded Construction Available as Dash One.
- Available in JAN, JTX, JTXV-1 To Mil-PRF-19500/127 (UR-1 Suffix)

Maximum Ratings

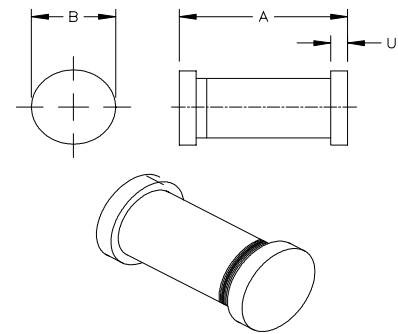
500 mW DC Power Dissipation (See Power Derating Curve In Figure 1)
-55°C to +175°C Operating and Storage Junction Temperature

LEADLESS GLASS ZENER DIODE SURFACE MOUNT

Application

This surface mountable zener diode series is similar to the 1N746 thru 1N759 in the DO-35 equivalent package except that it meets the new JEDEC surface mount outline DO-213AA. It is an ideal selection for applications of high density and low parasitic requirements. Due to its glass hermetic qualities, it may also be considered for high reliability applications.

Package Dimensions In Inches



Electrical Characteristics @ 25°C

MICROSEMI PART NUMBER	NOMINAL ZENER VOLTAGE V _Z @ I _{ZT} (NOTE 1)	ZENER TEST CURRENT I _{ZT}	MAXIMUM ZENER IMPEDANC E Z _{ZT} @ I _{ZT} (NOTE 2)	MAXIMUM REVERSE CURRENT @ V _R = 1 VOLT		MAXIMUM ZENER CURRENT I _{ZM} (NOTE 4)	TYPICAL TEMP COEFF. OF ZENER VOLTAGE α _{VZ}
				@ 25°C	@ +150°C		
**	VOLTS	mA	OHMS	µA	µA	mA	%/°C
MLL4370A	2.4	20	30	100	200	150	-.085
MLL4371A	2.7	20	30	75	150	135	-.080
MLL4372A	3.0	20	29	50	100	120	-.075
MLL746A	3.3	20	28	10	30	110	-.066
MLL747A	3.6	20	24	10	30	100	-.058
MLL748A	3.9	20	23	10	30	95	-.046
MLL749A	4.3	20	22	2	30	85	-.033
MLL750A	4.7	20	19	2	30	75	-.015
MLL751A	5.1	20	17	1	20	70	±0.10
MLL752A	5.6	20	11	1	20	65	+0.30
MLL753A	6.2	20	7	.1	20	60	+0.49
MLL754A	6.8	20	5	.1	20	55	+0.53
MLL755A	7.5	20	6	.1	20	50	+0.57
MLL756A	8.2	20	8	.1	20	45	+0.60
MLL757A	9.1	20	10	.1	20	40	+0.61
MLL758A	10.0	20	17	.1	20	35	+0.62
MLL759A	12.0	20	30	.1	20	30	+0.62

Note 1 Voltage measurements to be performed 20 seconds after application of dc test current.

Note 2 Zener impedance derived by superimposing on I_{ZT} at 60 Hz rms ac current equal to 10% I_{ZT} (2 mA ac).

Note 3 Allowance has been made for the increase in V_Z due to Z_Z and for the increase in junction temperature as the unit approaches thermal equilibrium at the power dissipation at 500 mW.

** Ordering Information:

- 1) Commercial: MLL746A thru MLL759A or MLL746A-1 thru MLL759A-1
MLL4370A thru MLL4372A or MLL4370A-1 thru MLL4372A-1
- 2) Military: JAN, JANTX, or JANTXV 1Nxxxx UR-1
- 3) Tight tolerance "C" suffix = ±2%, "D" suffix = ±1%

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	3.30	3.70	.130	.146
B	1.60	1.70	.063	.067
U	0.41	0.55	.016	.022

DO-213AA

Mechanical Characteristics

Case: Hermetically sealed glass with solder contact tabs at each end.

Finish: All external surfaces are corrosion resistant, readily solderable.

Polarity: Banded end is cathode.

Thermal Resistance: 100°C/Watt Maximum junction to end caps for "-1" construction and 150°C/W maximum junction to end caps for commercial.

Mounting Position: Any

Weight: 0.04 gm

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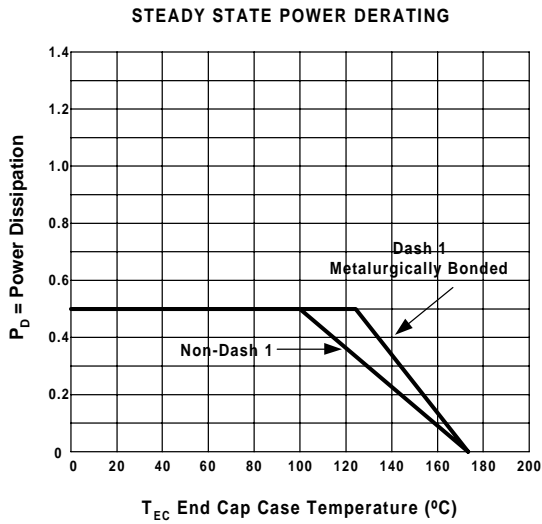


FIGURE 1

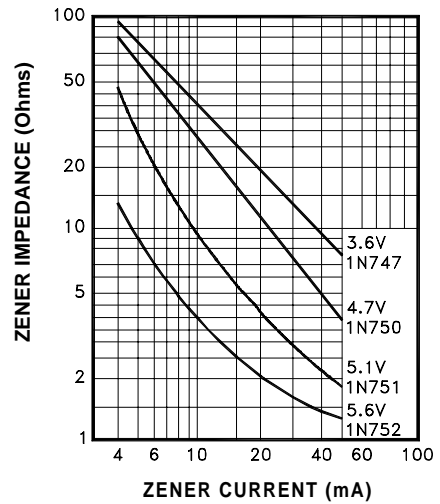


FIGURE 2
ZENER IMPEDANCE VS ZENER CURRENT
(TYPICAL)

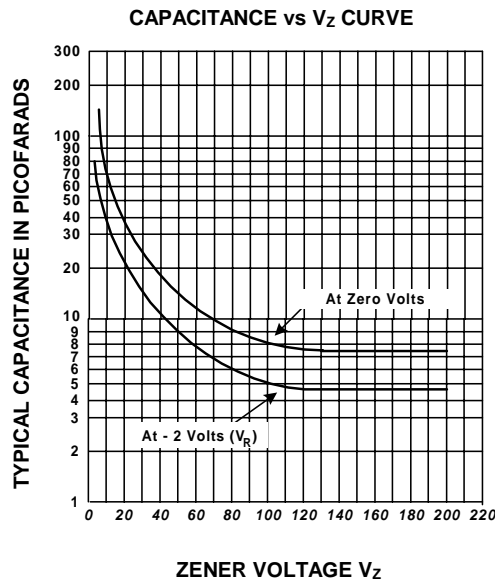


FIGURE 3
CAPACITANCE VS ZENER VOLTAGE
(TYPICAL)