

# 1N4728UR-1 thru 1N4764UR-1

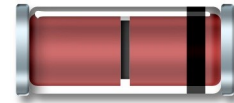
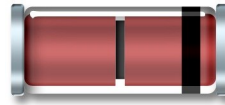


## 1W Surface Mount Zener Diode Series

Rev. V1

### Features

- Hermetic Glass DO-41 Package
- Double Plug Construction
- Metallurgically Bonded
- Available in JAN - JANTXV Equivalents



### Electrical Specifications: $T_A = +25^\circ\text{C}$ (unless otherwise specified)

TYPE NUMBER (Note 1)	NOMINAL ZENER VOLTAGE $V_Z$	ZENER TEST CURRENT $I_{ZT}$	$Z_{ZT}$ @ $I_{ZT}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_R$ @ $V_R$		MAXIMUM DC ZENER CURRENT $I_{ZM}$
	VOLTS	mA	$\Omega$	$\mu\text{A}$	VOLTS	mA
1N4728UR-1	3.3	76	10	100	1.0	276
1N4729UR-1	3.6	69	10	100	1.0	252
1N4730UR-1	3.9	64	9	50	1.0	234
1N4731UR-1	4.3	58	9	10	1.0	217
1N4732UR-1	4.7	53	8	10	1.0	193
1N4733UR-1	5.1	49	7	10	1.0	178
1N4734UR-1	5.6	45	5	10	2.0	162
1N4735UR-1	6.2	41	2	10	3.0	146
1N4736UR-1	6.8	37	3.5	10	4.0	133
1N4737UR-1	7.5	34	4.0	10	5.0	121
1N4738UR-1	8.2	31	4.5	10	6.0	110
1N4739UR-1	9.1	28	5.0	10	7.0	100
1N4740UR-1	10	25	7	10	7.6	91
1N4741UR-1	11	23	8	5	8.4	83
1N4742UR-1	12	21	9	5	9.1	76
1N4743UR-1	13	19	14	5	9.9	69
1N4744UR-1	15	17	16	5	11.4	61
1N4745UR-1	16	15.5	20	5	12.2	57
1N4746UR-1	18	14	22	5	13.7	50
1N4747UR-1	20	12.5	23	5	15.2	45
1N4748UR-1	22	11.5	25	5	16.7	41
1N4749UR-1	24	10.5	35	5	18.2	38

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TYPE NUMBER (Note 1)	NOMINAL ZENER VOLTAGE $V_Z$	ZENER TEST CURRENT $I_{ZT}$	$Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$		MAXIMUM DC ZENER CURRENT $I_{ZM}$
	VOLTS	$\mu\text{A}$	$\Omega$	$\mu\text{A}$	VOLTS	mA
1N4750UR-1	27	9.5	35	5	20.6	34
1N4751UR-1	30	8.5	40	5	22.8	30
1N4752UR-1	33	7.5	45	5	25.1	27
1N4753UR-1	36	7	50	5	27.4	25
1N4754UR-1	39	6.5	60	5	29.7	23
1N4755UR-1	43	6	70	5	32.7	22
1N4756UR-1	47	5.5	80	5	35.8	19
1N4757UR-1	51	5	95	5	38.8	18
1N4758UR-1	56	4.5	110	5	42.6	16
1N4759UR-1	62	4	125	5	47.1	14
1N4760UR-1	68	3.7	150	5	51.7	13
1N4761UR-1	75	3.3	175	5	56.0	12
1N4762UR-1	82	3.0	200	5	62.2	11
1N4763UR-1	91	2.8	250	5	69.2	10
1N4764UR-1	100	2.5	350	5	76.0	9

1. The JEDEC type numbers shown above have a standard tolerance of +/- 5% of the nominal Zener voltage. C suffix signifies 2% tolerance, D suffix signifies 1% tolerance.  $V_Z$  is measured with the diode in thermal equilibrium at  $25^\circ\text{C} + 3^\circ\text{C}$ .
2. The Zener impedance is derived from the 60Hz ac voltage, which results when an ac current having an rms value equal to 10% of the DC Zener current ( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed on  $I_{ZT}$  or  $I_{ZK}$ . Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and eliminate unstable units.
3. The reverse surge current is measured at  $25^\circ\text{C}$  ambient using a 1/2 square wave or equivalent sine wave pulse 1/120 second duration superimposed on  $I_{ZT}$ .

### Absolute Maximum Ratings

Parameter	Absolute Maximum
Steady State Power Dissipation	1W @ $+25^\circ\text{C}$
Forward Voltage	1.2V @ $I_F = 200 \text{ mA}$
$R_{\theta JA}$	170 $^\circ\text{C/W}$
Operating & Storage Temperature	$-65^\circ\text{C}$ to $+175^\circ\text{C}$

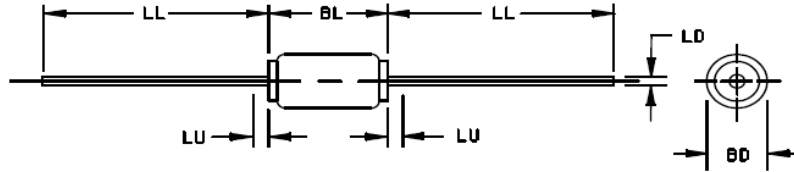
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Rev. V1

### Outline Drawing (DO-41)



Ltr	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
BD	.060	.085	1.52	2.16	3
BL	.106	.160	2.69	4.06	3
LD	.028	.032	0.71	0.81	
LL	.800	1.300	20.32	33.02	
LU		.050		1.27	4

#### NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Package contour optional with BD and length BL. Heat slugs, if any, shall be included within this cylinder length but shall not be subject to minimum limit of BD.
4. The specified lead diameters apply in the zone between .050 inch (1.27 mm) from the diode body and the end of the lead.
5. In accordance with ASME Y14.5M, diameters are equivalent to  $\Phi$ x symbology.

FIGURE 1. Physical dimensions of non-surface mount device (DO-41).

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