

# RD2.0F ~ RD82F

$V_Z$  : 2.0 - 82 Volts

$P_D$  : 1 Watt

### FEATURES :

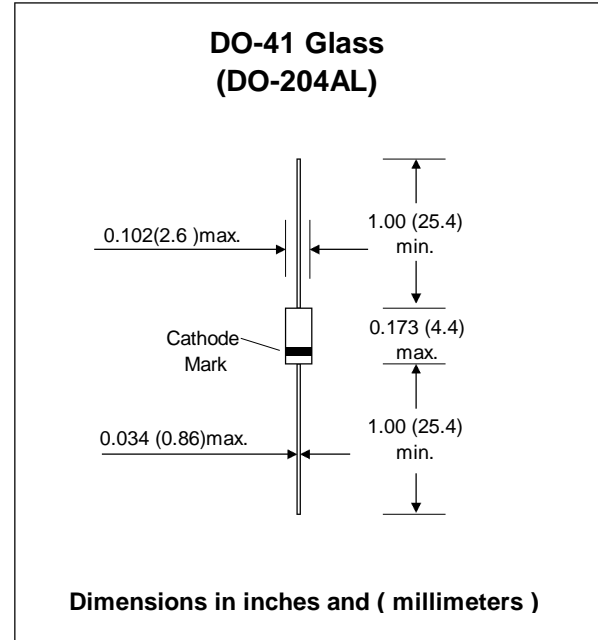
- \* Complete 2.0 to 82 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* Pb / RoHS Free

### MECHANICAL DATA

Case: DO-41 Glass Case

Weight: approx. 0.35g

# ZENER DIODES

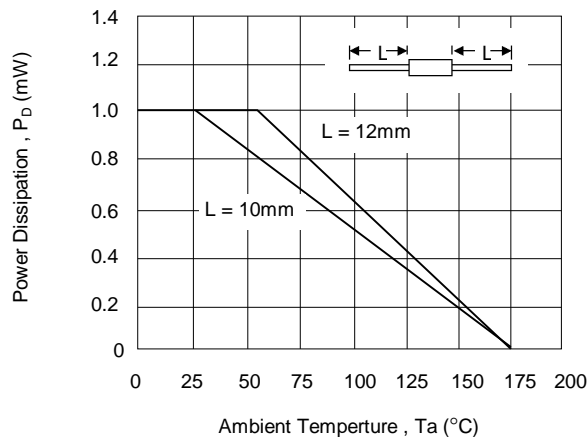


### MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Power Dissipation , See Fig. 1	$P_D$	1.0	W
Forward Current	$I_F$	200	mA
Junction Temperature	$T_j$	175	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 175	°C

**Fig. 1 Derating Curve**



## ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Type Number	Suffix		Zener Voltage $V_Z(V)^{(1)}$			Dynamic Impedance $Z_Z(W)^{(2)}$		Reverse Current $I_R(mA)$	
			Min.	Max.	$I_Z(mA)$	Max.	$I_Z(mA)$	Max.	$V_R(V)$
RD2.0F	B	B1	1.88	2.12	40	25	40	200	0.5
		B2	2.01	2.25					
RD2.2F	B	B1	2.11	2.34	40	20	40	200	0.7
		B2	2.21	2.45					
RD2.4F	B	B1	2.31	2.55	40	15	40	200	1.0
		B2	2.41	2.65					
RD2.7F	B	B1	2.52	2.78	40	15	40	150	1.0
		B2	2.68	2.93					
RD3.0F	B	B1	2.83	3.07	40	15	40	100	1.0
		B2	2.97	3.22					
RD3.3F	B	B1	3.13	3.37	40	15	40	80	1.0
		B2	3.27	3.51					
RD3.6F	B	B1	3.43	3.68	40	15	40	60	1.0
		B2	3.58	3.83					
RD3.9F	B	B1	3.73	4.00	40	15	40	40	1.0
		B2	3.88	4.15					
RD4.3F	B	B1	4.03	4.28	40	15	40	20	1.0
		B2	4.15	4.41					
		B3	4.28	4.55					
RD4.7F	B	B1	4.41	4.65	40	10	40	20	1.0
		B2	4.53	4.78					
		B3	4.66	4.91					
RD5.1F	B	B1	4.79	5.05	40	8	40	20	1.0
		B2	4.95	5.22					
		B3	5.10	5.38					
RD5.6F	B	B1	5.28	5.56	40	8	40	20	1.5
		B2	5.46	5.75					
		B3	5.65	5.95					
RD6.2F	B	B1	5.76	6.14	40	6	40	20	3.0
		B2	5.98	6.33					
		B3	6.17	6.52					
RD6.8F	B	B1	6.35	6.71	40	6	40	20	3.5
		B2	6.55	6.90					
		B3	6.74	7.10					
RD7.5F	B	B1	6.93	7.33	40	4	40	20	4.0
		B2	7.17	7.55					
		B3	7.39	7.80					
RD8.2F	B	B1	7.58	8.03	40	4	40	20	5.0
		B2	7.87	8.28					
		B3	8.12	8.54					
RD9.1F	B	B1	8.34	8.80	40	6	40	20	6.0
		B2	8.64	9.08					
		B3	8.91	9.38					
RD10F	B	B1	9.16	9.67	40	6	40	10	7.0
		B2	9.50	9.99					
		B3	9.83	10.40					
RD11F	B	B1	10.22	10.75	20	8	20	10	8.0
		B2	10.54	11.09					
		B3	10.87	11.43					
RD12F	B	B1	11.19	11.77	20	8	20	10	8.0
		B2	11.50	12.09					
		B3	11.80	12.41					

## ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Type Number	Suffix	Zener Voltage V <sub>Z</sub> (V) <sup>(1)</sup>			Dynamic Impedance Z <sub>Z</sub> (W) <sup>(2)</sup>		Reverse Current I <sub>R</sub> (mA)		
		Min.	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	V <sub>R</sub> (V)	
RD13F	B	B1	12.19	12.85	20	10	20	10	10
		B2	12.63	13.30					
		B3	13.11	13.83					
RD15F	B	B1	13.55	14.28	20	10	20	10	11
		B2	14.05	14.77					
		B3	14.52	15.26					
RD16F	B	B1	14.98	15.75	20	12	20	10	12
		B2	15.44	16.23					
		B3	15.89	16.71					
RD18F	B	B1	16.37	17.27	20	12	20	10	13
		B2	17.03	17.91					
		B3	17.64	18.55					
RD20F	B	B1	18.26	19.21	20	14	20	10	15
		B2	18.93	19.91					
		B3	19.59	20.84					
RD22F	B	B1	20.45	21.51	10	14	10	10	17
		B2	21.10	22.18					
		B3	21.75	22.86					
RD24F	B	B1	22.44	23.59	10	16	10	10	19
		B2	23.17	24.36					
		B3	23.90	25.14					
RD27F	B	B1	24.63	26.10	10	16	10	10	21
		B2	25.70	27.12					
		B3	26.72	28.43					
RD30F	B	B1	27.43	29.09	10	18	10	10	23
		B2	28.64	30.10					
		B3	29.57	31.26					
RD33F	B	B1	30.35	31.97	10	18	10	10	25
		B2	31.49	33.06					
		B3	32.39	34.15					
RD36F	B	B1	33.24	34.94	10	20	10	10	27
		B2	34.26	36.01					
		B3	35.19	37.01					
RD39F	B	B1	36.11	38.00	10	20	10	10	30
		B2	37.14	39.04					
		B3	38.13	40.80					
RD43F	B	40.00	45.00	10	50	10	5	33	
RD47F	B	44.00	49.00	10	50	10	5	36	
RD51F	B	48.00	54.00	10	50	10	5	39	
RD56F	B	53.00	60.00	10	50	10	5	43	
RD62F	B	58.00	66.00	10	50	10	5	47	
RD68F	B	64.00	72.00	10	70	10	5	52	
RD75F	B	70.00	79.00	10	90	10	5	57	
RD82F	B	77.00	87.00	10	90	10	5	63	

**Notes:**

- (1) Test with pulse (40 ms).
- (2) Z<sub>Z</sub> is measured at I<sub>Z</sub> given an very small A.C. Current Signal.