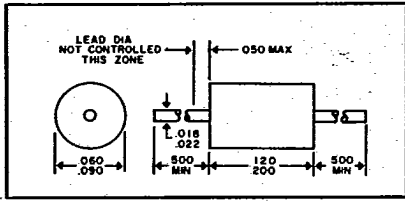


ZENER DIODES

DO-35 Case



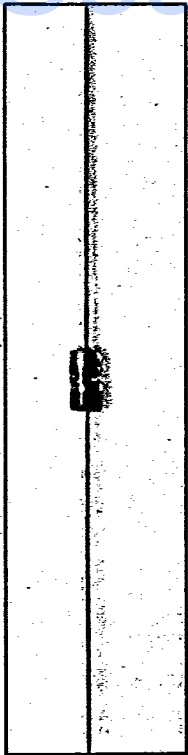
250mW

DO-35 Case

| Type† | Nominal Zener Voltage $V_Z @ I_{ZT} = 50 \mu A$ V | Maximum Reverse Current I_R μA | Test Voltage V_R V | Maximum Zener Current I_{ZM} mA | Maximum‡ Voltage Change ΔV_Z V |
|--------|---|---|----------------------------|---|--|
| 1N4683 | 3.0 | 0.8 | 1.0 | 85 | 0.90 |
| 1N4684 | 3.3 | 7.5 | 1.5 | 80 | 0.95 |
| 1N4685 | 3.6 | 7.5 | 2.0 | 75 | 0.95 |
| 1N4686 | 3.9 | 5.0 | 2.0 | 70 | 0.97 |
| 1N4687 | 4.3 | 4.0 | 2.0 | 65 | 0.99 |
| 1N4688 | 4.7 | | 3.0 | 60 | 0.99 |
| 1N4689 | 5.1 | | 3.0 | 55 | 0.97 |
| 1N4690 | 5.6 | 10 | 4.0 | 50 | 0.96 |
| 1N4691 | 6.2 | | 5.0 | 45 | 0.95 |
| 1N4692 | 6.8 | | 5.1 | 35 | 0.90 |
| 1N4693 | 7.5 | 10 | 5.7 | 31.8 | 0.75 |
| 1N4694 | 8.2 | 1.0 | 6.2 | 29.0 | 0.50 |
| 1N4695 | 8.7 | 1.0 | 6.6 | 27.4 | 0.10 |
| 1N4696 | 9.1 | 1.0 | 6.9 | 26.2 | 0.08 |
| 1N4697 | 10 | 1.0 | 7.6 | 24.8 | 0.10 |
| 1N4698 | 11 | | 8.4 | 21.6 | 0.11 |
| 1N4699 | 12 | | 9.1 | 20.4 | 0.12 |
| 1N4700 | 13 | 0.05 | 9.8 | 19.0 | 0.13 |
| 1N4701 | 14 | | 10.6 | 17.5 | 0.14 |
| 1N4702 | 15 | | 11.4 | 16.3 | 0.15 |
| 1N4703 | 16 | 0.05 | 12.1 | 15.4 | 0.16 |
| 1N4704 | 17 | 0.05 | 12.9 | 14.5 | 0.17 |
| 1N4705 | 18 | 0.05 | 13.6 | 13.2 | 0.18 |
| 1N4706 | 19 | 0.05 | 14.4 | 12.5 | 0.19 |
| 1N4707 | 20 | 0.01 | 15.2 | 11.9 | 0.20 |
| 1N4708 | 22 | | 16.7 | 10.8 | 0.22 |
| 1N4709 | 24 | | 18.2 | 9.9 | 0.24 |
| 1N4710 | 25 | 0.01 | 19.0 | 9.5 | 0.25 |
| 1N4711 | 27 | | 20.4 | 8.8 | 0.27 |
| 1N4712 | 28 | | 21.2 | 8.5 | 0.28 |
| 1N4713 | 30 | | 22.8 | 7.9 | 0.30 |
| 1N4714 | 33 | 0.01 | 25.0 | 7.2 | 0.33 |
| 1N4715 | 36 | | 27.3 | 6.6 | 0.36 |
| 1N4716 | 39 | | 29.6 | 6.1 | 0.39 |
| 1N4717 | 43 | | 32.6 | 5.5 | 0.43 |

†Standard tolerances of 5%
‡Voltage change is equal to the difference between V_Z at $100 \mu A$ and V_Z at $10 \mu A$.

DO-35 Case



1W

DO-41 Case

| Type† | Zener Voltage V_Z | Test Current I_{ZT} mA | Maximum‡ Dynamic Impedance $Z_{ZT} @ I_{ZT}$ Ω | Forward Voltage $V_F @ I_F$ |
|---------|------------------------|--------------------------------|---|--------------------------------|
| APD 3.3 | 3.3 | 76 | | |
| APD 3.6 | 3.6 | 69 | 15 | 1.35 @ 1A |
| APD 3.9 | 3.9 | 64 | | |
| APD 4.3 | 4.3 | 58 | | |
| APD 4.7 | 4.7 | 53 | | |
| APD 5.1 | 5.1 | 49 | 10 | 1.35 @ 1A |
| APD 5.6 | 5.6 | 45 | | |
| APD 6.2 | 6.2 | 41 | | |
| APD 6.8 | 6.8 | 37 | | |
| APD 7.5 | 7.5 | 34 | | |
| APD 8.2 | 8.2 | 31 | | |
| APD 9.1 | 9.1 | 28 | 10 | 1.35 @ 1A |
| APD10.0 | 10.1 | 25 | | |
| APD11.0 | 11.0 | 23 | | |
| APD12.0 | 12.0 | 21 | | |
| APD13.0 | 13.0 | 19 | | |



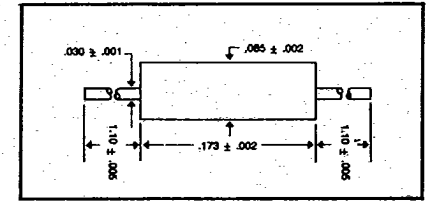
ZENER DIODES

1W

DO-41 Case

DO-41 Case

| Type† | Zener Voltage V _Z | Test Current I _{ZT} mA | Maximum‡ Dynamic Impedance Z _{zT} @ I _{ZT} Ω | Forward Voltage V _F @ I _F |
|--|---------------------------------|---------------------------------------|--|---|
| APD15.0 APD16.0 APD18.0 APD20.0 | 15.0 16.0 18.0 20.0 | 17 15.5 14 12.5 | 25 | 1.35 @ 1A |
| APD22.0 APD24.0 APD27.0 APD30.0 | 22.0 24.0 27.0 30.0 | 11.5 10.5 9.5 8.5 | 40 | 1.35 @ 1A |
| APD33.0 APD36.0 APD39.0 | 33.0 36.0 39.0 | 7.5 7.0 6.5 | 60 | 1.35 @ 1A |



†Standard tolerance of 5, 10, and 20% are available — no suffix is ±20% tolerance, "A" suffix is ±10% tolerance, and "B" suffix is ±5.0% tolerance.
‡Zener impedance is derived from the 1kHz voltage created when AC current with RMS value of 10% of DC zener test current is superimposed on the test current.

1W

DO-41 Case

| Type† | Nominal Zener Voltage V _Z @ I _{ZT} V | Test Current I _{ZT} mA | Maximum‡ Dynamic Impedance Z _{zT} @ I _{ZT} Ω | Typical Temperature Coefficient T _c %/°C |
|--|--|--|--|---|
| 1N4728 1N4729 1N4730 1N4731 | 3.3 3.6 3.9 4.3 | 76 69 64 58 | 10.0 10.0 9.0 9.0 | — — — — |
| 1N4732 1N4733 1N4734 1N4735 | 4.7 5.1 5.6 6.2 | 53 49 45 41 | 8.0 7.0 5.0 2.0 | — — — — |
| 1N4736 1N4737 1N4738 1N4739 1N4740 | 6.8 7.5 8.2 9.1 10.0 | 37 34 31 28 25 | 3.5 4.0 4.5 5.0 7.0 | — — — — — |
| 1N4741 1N4742 1N4743 1N4744 1N4745 | 11 12 13 15 16 | 23.0 21.0 19.0 17.0 15.5 | 8 9 10 14 16 | — — — — — |
| 1N4746 1N4747 1N4748 1N4749 1N4750 | 18 20 22 24 27 | 14.0 12.5 11.5 10.5 9.5 | 20 22 23 25 35 | — — — — — |
| 1N4751 1N4752 1N4753 1N4754 1N4755 1N4756 | 30 33 36 39 43 47 | 8.5 7.5 7 6.5 6 5.5 | 40 45 50 60 70 80 | — — — — — — |
| 1N4757 1N4758 1N4759 1N4760 1N4761 1N4762 | 51 56 62 68 75 82 | 5 4.5 4 3.7 3.3 3 | 95 110 125 150 175 200 | — — — — — — |

†Standard types are ±10% tolerance, suffix "A" denotes ±5% tolerance.
‡Zener impedance is derived from the 1kHz voltage created when AC current with RMS value of 10% of DC zener test current is superimposed on the test current.

DO-41 Case

