

RD4.7JS ~ RD39JS

V_Z : 4.7 - 39 Volts

P_D : 400 mW

FEATURES :

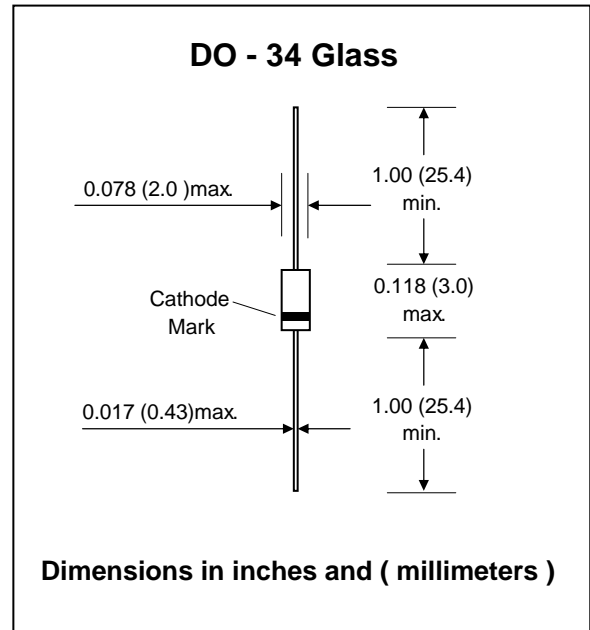
- * Complete 4.7 to 39 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * Pb / RoHS Free

MECHANICAL DATA

Case: DO-34 Glass Case

Weight: approx. 0.093g

SILICON ZENER DIODES

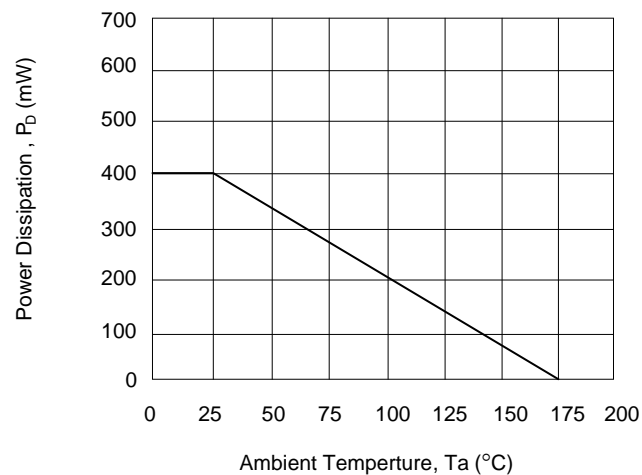


MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

| Rating | Symbol | Value | Unit |
|----------------------------|--------|---------------|------|
| Power Dissipation | P_D | 400 | mW |
| Forward Current | I_F | 150 | mA |
| Junction Temperature Range | T_j | - 55 to + 175 | °C |
| Storage Temperature Range | T_s | - 55 to + 175 | °C |

Derating Curve



ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

| Type Number | Suffix | Zener Voltage ¹⁾ V _Z (V) | | | Dynamic Impedance Z _Z (Ω) | | Knee Dynamic Impedance Z _{ZK} (Ω) | | Reverse Current I _R (μA) | |
|-------------|--------|---|-------|---------------------|---|---------------------|---|---------------------|--|--------------------|
| | | Min. | Max. | I _Z (mA) | Max. | I _Z (mA) | Max. | I _Z (mA) | Max. | V _R (V) |
| RD4.7JS | AB | 4.42 | 4.90 | 5 | 100 | 5 | 800 | 0.5 | 2.0 | 1.0 |
| | AB1 | 4.42 | 4.61 | | | | | | | |
| | AB2 | 4.55 | 4.75 | | | | | | | |
| | AB3 | 4.69 | 4.90 | | | | | | | |
| RD5.1JS | AB | 4.84 | 5.37 | 5 | 80 | 5 | 500 | 0.5 | 2.0 | 1.5 |
| | AB1 | 4.84 | 5.04 | | | | | | | |
| | AB2 | 4.98 | 5.20 | | | | | | | |
| | AB3 | 5.14 | 5.37 | | | | | | | |
| RD5.6JS | AB | 5.31 | 5.92 | 5 | 60 | 5 | 200 | 0.5 | 1.0 | 2.5 |
| | AB1 | 5.31 | 5.55 | | | | | | | |
| | AB2 | 5.49 | 5.73 | | | | | | | |
| | AB3 | 5.67 | 5.92 | | | | | | | |
| RD6.2JS | AB | 5.86 | 6.53 | 5 | 60 | 5 | 100 | 0.5 | 1.0 | 3.0 |
| | AB1 | 5.86 | 6.12 | | | | | | | |
| | AB2 | 6.06 | 6.33 | | | | | | | |
| | AB3 | 6.26 | 6.53 | | | | | | | |
| RD6.8JS | AB | 6.47 | 7.14 | 5 | 40 | 5 | 60 | 0.5 | 0.5 | 3.5 |
| | AB1 | 6.47 | 6.73 | | | | | | | |
| | AB2 | 6.65 | 6.93 | | | | | | | |
| | AB3 | 6.86 | 7.14 | | | | | | | |
| RD7.5JS | AB | 7.06 | 7.84 | 5 | 30 | 5 | 60 | 0.5 | 0.5 | 4.0 |
| | AB1 | 7.06 | 7.36 | | | | | | | |
| | AB2 | 7.28 | 7.60 | | | | | | | |
| | AB3 | 7.52 | 7.84 | | | | | | | |
| RD8.2JS | AB | 7.76 | 8.64 | 5 | 30 | 5 | 60 | 0.5 | 0.5 | 5.0 |
| | AB1 | 7.76 | 8.10 | | | | | | | |
| | AB2 | 8.02 | 8.36 | | | | | | | |
| | AB3 | 8.28 | 8.64 | | | | | | | |
| RD9.1JS | AB | 8.56 | 9.55 | 5 | 30 | 5 | 60 | 0.5 | 0.5 | 6.0 |
| | AB1 | 8.56 | 8.93 | | | | | | | |
| | AB2 | 8.85 | 9.23 | | | | | | | |
| | AB3 | 9.15 | 9.55 | | | | | | | |
| RD10JS | AB | 9.45 | 10.55 | 5 | 30 | 5 | 60 | 0.5 | 0.1 | 7.0 |
| | AB1 | 9.45 | 9.87 | | | | | | | |
| | AB2 | 9.77 | 10.21 | | | | | | | |
| | AB3 | 10.11 | 10.55 | | | | | | | |
| RD11JS | AB | 10.44 | 11.56 | 5 | 30 | 5 | 60 | 0.5 | 0.1 | 8.0 |
| | AB1 | 10.44 | 10.88 | | | | | | | |
| | AB2 | 10.76 | 11.22 | | | | | | | |
| | AB3 | 11.10 | 11.56 | | | | | | | |
| RD12JS | AB | 11.42 | 12.60 | 5 | 30 | 5 | 80 | 0.5 | 0.1 | 9.0 |
| | AB1 | 11.42 | 11.90 | | | | | | | |
| | AB2 | 11.74 | 12.24 | | | | | | | |
| | AB3 | 12.08 | 12.60 | | | | | | | |
| RD13JS | AB | 12.47 | 13.69 | 5 | 37 | 5 | 80 | 0.5 | 0.1 | 10 |
| | AB1 | 12.47 | 13.03 | | | | | | | |
| | AB2 | 12.91 | 13.49 | | | | | | | |
| | AB3 | 13.37 | 13.96 | | | | | | | |
| RD15JS | AB | 13.84 | 15.52 | 5 | 42 | 5 | 80 | 0.5 | 0.1 | 11 |
| | AB1 | 13.84 | 14.46 | | | | | | | |
| | AB2 | 14.34 | 14.98 | | | | | | | |
| | AB3 | 14.85 | 15.52 | | | | | | | |

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

| Type Number | Suffix | Zener Voltage ¹⁾ V _Z (V) | | I _Z (mA) | Dynamic Impedance Z _Z (Ω) | | Knee Dynamic Impedance Z _{ZK} (Ω) | | Reverse Current I _R (μA) | |
|-------------|--------|---|-------|---------------------|---|---------------------|---|---------------------|--|--------------------|
| | | Min. | Max. | | Max. | I _Z (mA) | Max. | I _Z (mA) | Max. | V _R (V) |
| RD16JS | AB | 15.37 | 17.09 | 5 | 50 | 5 | 80 | 0.5 | 0.1 | 12 |
| | AB1 | 15.37 | 16.01 | | | | | | | |
| | AB2 | 15.85 | 16.51 | | | | | | | |
| | AB3 | 16.35 | 17.09 | | | | | | | |
| RD18JS | AB | 16.94 | 19.03 | 5 | 65 | 5 | 80 | 0.5 | 0.1 | 13 |
| | AB1 | 16.94 | 17.70 | | | | | | | |
| | AB2 | 17.56 | 18.53 | | | | | | | |
| | AB3 | 18.21 | 19.03 | | | | | | | |
| RD20JS | AB | 18.86 | 21.08 | 5 | 85 | 5 | 100 | 0.5 | 0.1 | 15 |
| | AB1 | 18.86 | 19.70 | | | | | | | |
| | AB2 | 19.52 | 20.39 | | | | | | | |
| | AB3 | 20.21 | 21.08 | | | | | | | |
| RD22JS | AB | 20.88 | 23.17 | 5 | 100 | 5 | 100 | 0.5 | 0.1 | 17 |
| | AB1 | 20.88 | 21.77 | | | | | | | |
| | AB2 | 21.54 | 22.47 | | | | | | | |
| | AB3 | 22.23 | 23.17 | | | | | | | |
| RD24JS | AB | 22.93 | 25.57 | 5 | 120 | 5 | 120 | 0.5 | 0.1 | 19 |
| | AB1 | 22.93 | 23.96 | | | | | | | |
| | AB2 | 23.72 | 24.78 | | | | | | | |
| | AB3 | 24.54 | 25.57 | | | | | | | |
| RD27JS | AB | 25.20 | 28.61 | 5 | 150 | 5 | 150 | 0.5 | 0.1 | 21 |
| | AB1 | 25.20 | 26.50 | | | | | | | |
| | AB2 | 26.19 | 27.53 | | | | | | | |
| | AB3 | 27.21 | 28.61 | | | | | | | |
| RD30JS | AB | 28.22 | 31.74 | 5 | 200 | 5 | 200 | 0.5 | 0.1 | 23 |
| | AB1 | 28.22 | 29.66 | | | | | | | |
| | AB2 | 29.19 | 30.69 | | | | | | | |
| | AB3 | 30.20 | 31.74 | | | | | | | |
| RD33JS | AB | 32.18 | 34.83 | 5 | 250 | 5 | 250 | 0.5 | 0.1 | 25 |
| | AB1 | 32.18 | 32.78 | | | | | | | |
| | AB2 | 32.15 | 33.79 | | | | | | | |
| | AB3 | 33.13 | 34.83 | | | | | | | |
| RD36JS | AB | 34.12 | 37.91 | 5 | 300 | 5 | 300 | 0.5 | 0.1 | 27 |
| | AB1 | 34.12 | 35.86 | | | | | | | |
| | AB2 | 35.07 | 36.87 | | | | | | | |
| | AB3 | 36.07 | 37.91 | | | | | | | |
| RD39JS | AB | 37.04 | 40.99 | 5 | 360 | 5 | 360 | 0.5 | 0.1 | 30 |
| | AB1 | 37.04 | 38.94 | | | | | | | |
| | AB2 | 38.00 | 39.94 | | | | | | | |
| | AB3 | 38.99 | 40.99 | | | | | | | |

Notes:

- (1) tested with pulse (40 ms).
- (2) Z_Z and Z_{ZK} are measured at ½ by given a very small AC. current signal
- (3) Suffix AB is suffix AB1, AB2 or suffix AB3.