

- Features:
- ✓ Precision metal film
 - ✓ Superior electrical, TCR performances
 - ✓ Flame-retardant coatings are standard
 - ✓ Panasert available (selected sizes: contact factory)
 - ✓ RNM (mini) an ideal choice where size constraints apply
 - ✓ RN 5% replaces MP series
 - ✓ RoHS compliant / lead-free available (RNF/RNMF)
 - ✓ Lower or higher resistance values may be possible (contact factory)

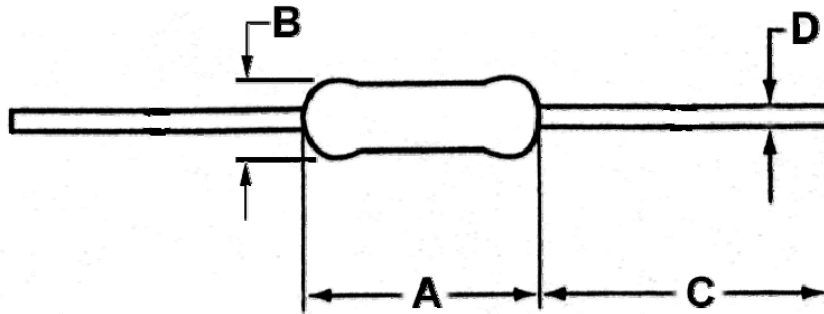


| Electrical Specifications | | | | | | | | | | | |
|---------------------------|---------|-----------------------------|--------------------------------------|-----------------------|------------------------------------|---------------------------|-------------|--------------|--------------|-----------|-----------|
| Type / Code | Mil Ref | Power Rating (Watts) @ 70°C | Maximum Working Voltage [Ⓞ] | Maximum Pulse Voltage | Resistance Temperature Coefficient | Ohmic Range and Tolerance | | | | | |
| | | | | | | 0.1% | 0.25% | 0.5% | 1% | 2% | 5% |
| RN 1/8 | RN 50 | 0.125W | 200V | 400V | ±25 ppm/°C | 100Ω - 100K | 100Ω - 100K | 49.9Ω - 499K | 49.9Ω - 499K | - | - |
| | | | | | ±50 ppm/°C | 100Ω - 100K | 100Ω - 100K | 10Ω - 1M | 1Ω - 1M | - | - |
| | | | | | ±100 ppm/°C | 100Ω - 100K | 100Ω - 100K | 10Ω - 1M | 0.1Ω - 4.9M | 1Ω - 2.2M | 1Ω - 2.2M |
| RN 1/4 | RN 55 | 0.250W | 250V | 500V | ±10 ppm/°C | 100Ω - 100K | - | - | - | - | - |
| | | | | | ±25 ppm/°C | 1Ω - 2.2M | 1Ω - 2.2M | 1Ω - 2.2M | 10Ω - 1M | - | - |
| | | | | | ±50 ppm/°C | 1Ω - 2.2M | 1Ω - 2.2M | 1Ω - 2.2M | 1Ω - 1M | - | - |
| | | | | | ±100 ppm/°C | 1Ω - 2.2M | 1Ω - 2.2M | 1Ω - 2.2M | 0.1Ω - 1M | 1Ω - 10M | 1Ω - 10M |
| RN 1/2 | RN 60 | 0.500W | 350V | 700V | ±25 ppm/°C | 100Ω - 100K | 100Ω - 100K | 49.9Ω - 499K | 49.9Ω - 499K | - | - |
| | | | | | ±50 ppm/°C | 100Ω - 100K | 100Ω - 100K | 10Ω - 1M | 10Ω - 1M | - | - |
| | | | | | ±100 ppm/°C | 100Ω - 100K | 100Ω - 100K | 10Ω - 1M | 0.1Ω - 5.1M | 1Ω - 10M | 1Ω - 10M |
| RN 1 | RN 65 | 1.000W | 350V | 700V | ±25 ppm/°C | - | - | 100Ω - 51K | 10Ω - 100K | - | - |
| | | | | | ±50 ppm/°C | - | - | 10Ω - 100K | 10Ω - 1M | - | - |
| | | | | | ±100 ppm/°C | - | - | 100Ω - 51K | 1Ω - 1M | - | - |
| RN 2 | - | 2.000W | 350V | 800V | ±25 ppm/°C | - | - | - | 10Ω - 100K | - | - |
| | | | | | ±50 ppm/°C | - | - | - | 10Ω - 100K | - | - |
| | | | | | ±100 ppm/°C | - | - | - | 10Ω - 1M | - | 10Ω - 1M |
| RNM 1/4 | - | 0.250W | 200V | 400V | ±25 ppm/°C | 100Ω - 100K | 100Ω - 100K | 49.9Ω - 499K | 49.9Ω - 499K | - | - |
| | | | | | ±50 ppm/°C | 100Ω - 100K | 100Ω - 100K | 10Ω - 1M | 1Ω - 1M | - | - |
| | | | | | ±100 ppm/°C | 100Ω - 100K | 100Ω - 100K | 10Ω - 1M | 0.1Ω - 1M | 1Ω - 1M | 1Ω - 1M |
| RNM 1/2 | RL 07 | 0.500W | 350V | 600V | ±25 ppm/°C | 100Ω - 294K | 100Ω - 294K | 49.9Ω - 1M | 49.9Ω - 1M | - | - |
| | | | | | ±50 ppm/°C | 49.9Ω - 1M | 49.9Ω - 1M | 10Ω - 1M | 1Ω - 1M | - | - |
| | | | | | ±100 ppm/°C | 49.9Ω - 1M | 49.9Ω - 1M | 10Ω - 1M | 0.1Ω - 1M | 1Ω - 1M | 1Ω - 1M |

Ⓞ Lesser of \sqrt{PR} or maximum working voltage.

How to Order

| SEI Type | | Code | TCR | | Nominal Resistance | Tolerance | | Packaging | | | | |
|----------|---------------|------|-----|--------|--------------------|-----------|-------------------|-----------|------|-------------|------|------|
| RN | | 1/4 | T1 | | 4.75K | 1% | | R | | | | |
| Type | Description | Code | TCR | | Tolerance Values | | SEI Types | Pkg Qty | Code | Description | | |
| RN | EIA standard | 1/8 | T1 | 100ppm | 0.1% | E96 | 1/8, 1/4, RNM 1/2 | 5,000 | R | Reel | | |
| RNM | Mini | 1/4 | T2 | 50ppm | 0.25% | E96 | 1/2, 1 | 2,500 | | T | Ammo | |
| RNF | Standard RoHS | 1/2 | T9 | 25ppm | 0.5% | E96 | 1/8, RNM 1/2 | 5,000 | A | | Bulk | |
| RNMF | Mini RoHS | 1 | TB | 10ppm | 1% | E96, E24 | 1/4 | 2,500 | | | R | Reel |
| PRN | Panasert | 2 | | | 5% | E24 | 1/2 | 2,000 | | | | Ammo |
| PRNF | Pana - RoHS | | | | | | 1 | 1,000 | | Bulk | | |
| | | | | | | | 1/8, 1/4, 1/2 | 1,000 | | Bulk | | |
| | | | | | | | 2 | 1,000 | | Bulk | | |



| Mechanical Specifications | | | | | |
|---------------------------|-----------------------------|------------------------------|-------------------------|------------------------------|--------------|
| Type / Code | A Body Length | B Body Diameter | C Lead Length (Bulk) | D Lead Diameter | Units |
| RN 1/8 | 0.13 ± 0.010 3.2 ± 0.2 | 0.069 ± 0.010 1.75 ± 0.25 | 1.10 ± 0.08 28 ± 2 | 0.017 ± 0.003 0.44 ± 0.07 | inches mm |
| RN 1/4 | 0.25 ± 0.026 6.35 ± 0.65 | 0.093 ± 0.010 2.35 ± 0.25 | 1.10 ± 0.08 28 ± 2 | 0.022 ± 0.004 0.56 ± 0.09 | inches mm |
| RN 1/2 | 0.34 ± 0.030 8.75 ± 0.75 | 0.128 ± 0.030 3.25 ± 0.75 | 1.10 ± 0.12 28 ± 3 | 0.26 ± 0.004 0.65 ± 0.1 | inches mm |
| RN 1 | 0.433 ± 0.04 11 ± 1 | 0.177 ± 0.02 4.50 ± 0.5 | 1.18 ± 0.12 30 ± 3 | 0.030 ± 0.002 0.75 ± 0.05 | inches mm |
| RN 2 | 0.59 x 0.04 15 x 1 | 0.2 x 0.02 5 x 0.5 | 1.18 ± 0.12 30 ± 3 | 0.027 x 0.004 0.7 x 0.1 | inches mm |
| RNM 1/4 | 0.13 ± 0.010 3.20 ± 0.2 | 0.070 ± 0.003 1.78 ± 0.08 | 1.10 ± 0.08 28 ± 2 | 0.017 ± 0.001 0.44 ± 0.02 | inches mm |
| RNM 1/2 | 0.25 ± 0.026 6.35 ± 0.65 | 0.093 ± 0.010 2.35 ± 0.25 | 1.10 ± 0.08 28 ± 2 | 0.022 ± 0.002 0.56 ± 0.04 | inches mm |

| Performance Characteristics | | |
|-----------------------------|-------------------------|-------------|
| Test | Standard / Method | Requirement |
| Biased Humidity | MIL-STD 202, Method 103 | ± 1.5% |
| Resistance to Solder Heat | MIL-STD 202, Method 210 | ± 0.5% |
| Insulation Resistance | JIS C 5202 5.6 | ± 0.5% |
| Load Life | MIL-STD 202, Method 208 | ± 1% |
| Terminal Strength | MIL-STD 202, Method 211 | ± 0.2% |
| Temperature Cycling | JESD22 Method JA-104 | ± 1% |
| Moisture Resistance | MIL-STD 202, Method 106 | ± 0.5% |

Operating Temperature Range: -55°C to +155°C