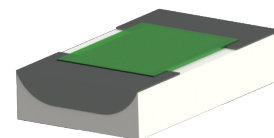


RK0503ZZ-XXXXWN-90 Features:

- Quarter Wraparound Terminal Configuration
- Solder or Epoxy Mount Terminals
- Customer Defined Testing Available
- RoHS Compliant or SnPb Available
- Tape and Reel or Waffle Pack Available (Standard is bulk)

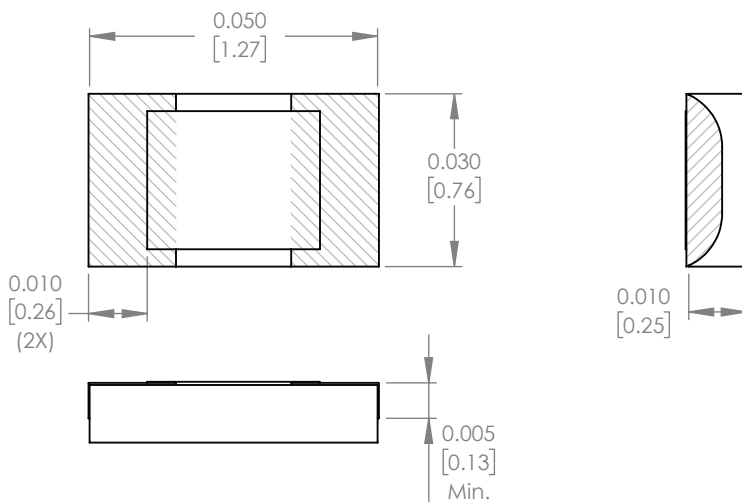


RK0503ZZ-XXXXWN-90 Parameters:

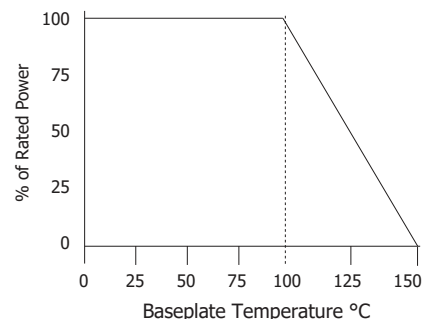
| | |
|------------------------|--|
| Resistance Range: | 0.5Ω - 1MΩ |
| Rated Power: | 0.15W* |
| Construction: | Thick Film on Al ₂ O ₃ |
| Operating Temperature: | -55 to +150°C |

* Rating based on ≤100°C constant baseplate temperature

RK0503ZZ-XXXXWN-90 Dimensions:



RK0503ZZ-XXXXWN-90 Power Derating Curve



Dimensions in inches [mm]
 Tolerance is ± 0.005 [0.127]
 unless otherwise stated

Ordering Information:

| | | | | | | | | | |
|---|-------------|-----------|----------|---|-------------------------------|---|----------|---|--|
| RK | 0503 | ZZ | - | XXXX | W | N | - | 90 | UU |
| Prefix for Resistor w/ Quarter Wraparound Terminals | | | | Value Code Examples 50R0 - 50Ω 1002 - 10KΩ 1000 - 100Ω 1003 - 100KΩ 1001 - 1KΩ 1004 - 1MΩ | Tolerance G - 2% J - 5% | Normal Inspection Contact factory for additional options | | Substrate 90 - 0.010" Al ₂ O ₃ | Packaging Blank - Bulk WP - Waffle Pack TRD - Tape & Reel |
| Size 0503 | | | | | | | | | |

Terminal Metallization

| | |
|------|--|
| AS - | Tin Lead over Platinum Palladium Gold |
| CB - | SnPb over Nickel over Silver |
| CC - | 100% Matte Tin over Copper over Silver |
| CT - | 100% Matte Tin over Nickel over Silver |
| GA - | Gold |

| | RoHS | Magnetic | Solder | Epoxy | Wirebond |
|----|------|----------|--------|-------|----------|
| AS | No | No | Yes | No | No |
| CB | No | Yes | Yes | No | No |
| CC | Yes | No | Yes | No | No |
| CT | Yes | Yes | Yes | No | No |
| GA | Yes | No | No | Yes | Yes |

Barry Industries reserves the right to change part number and/or process without notification.

RK0503ZZ-XXXXWN-90 Reliability Specifications:

| Parameter: | Test Condition: | Results: |
|------------------------------|---|---|
| Short Time Overload | Apply 1.1x Rated Power for 5 Seconds. | ≤ 5.0% Resistance Shift |
| Rated Load Life | Apply 1/2 Power Under 40°C ±2°C 90 Minutes on/ 30 Minutes off. Repeat for 100 hours | ≤ 5.0% Resistance Shift |
| Moisture Resistance | MIL-PRF-55342 para 4.8.9 95% RH, 25°C - 65°C | ≤ 5.0% Resistance Shift |
| Resistance to Soldering Heat | MIL-STD-202 Method 210 and MIL-PRF-55342 Para 4.8.8.1 | ≤ 5.0% Resistance Shift |
| Solderability | MIL-PRF-55342 Para 4.8.12 | >95% Covered |
| High Temperature Storage | 125°C ±2°C for 500 Hours | 1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual) |
| Thermal Shock | -65 to +125 30 Minutes Dwell, 5 Cycles | 1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual) |

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