RMKD (CNP)



Vishay Sfernice

Hermetic, Dual-In-Line Packaged Thin Film Resistor, **Through Hole Networks**



DESIGN SUPPORT TOOLS

click logo to get started.

Models

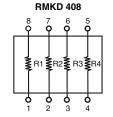
Available

The superstable RMKD nickel-chromium integrated networks are available in a range of standard designs which bring a completely new "state-of-the-art" to precision network performance criteria.

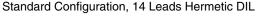
Circuit designers can now incorporate into their circuitry the ultimate in today's performance characteristics as "standards", without needing to call out specially engineered designs at premium prices.

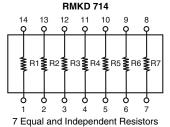
SCHEMATIC

Standard Configuration, 8 Leads Hermetic DIL

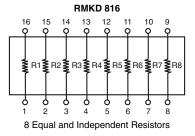


4 Equal and Independent Resistors





Standard Configuration, 16 Leads Hermetic DIL



Notes

For different values in a network a specific part number is used: CNPxxxx. Please consult Vishay Sfernice For values outside ohmic range please consult Vishay Sfernice

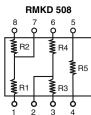
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FEATURES

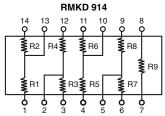
- 500 Ω to 200 kΩ
- High stability: < 300 ppm maximum, 2000 h at Pn at +70 °C
- Gold terminal
- Hermetic cases: Dual-in-line
- Through hole
- Custom available (CNP)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

TYPICAL PERFORMANCE

| | ABS | TRACKING |
|------|-----------|----------|
| TCR | 10 ppm/°C | 1 ppm/°C |
| | ABS | RATIO |
| TOL. | 0.05 % | 0.02 % |



Dual Divider Feedback Network with Equal Value Resistors



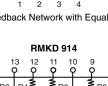
Quad Divider Feedback Network with Equal Value Resistors



COMPLIANT

HALOGEN

FREE



1 For technical questions, contact: sferthinfilm@vishay.com Document Number: 60049

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ISHAY

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STANDARD ELECTRICAL SPECIFICATIONS

| MODEL | RESISTANCE RANGE Ω | POWER RATING ⁽¹⁾ W | ABSOLUTE TOLERANCE ± % | RATIO TOLERANCE % | ABSOLUTE TCR ⁽²⁾ ± ppm/°C | RATIO TCR ⁽³⁾ ± ppm/°C |
|----------|--------------------------|-------------------------------------|------------------------------|-------------------------|--|---|
| RMKD 408 | 500 to 200K | 0.125 | 0.05, 0.1 | 0.01, 0.02, 0.05 | 5, 10 | 1, 2 |
| RMKD 508 | 500 to 200K | 0.250 | 0.05, 0.1 | 0.01, 0.02, 0.05 | 5, 10 | 1, 2 |
| RMKD 714 | 500 to 200K | 0.250 | 0.05, 0.1 | 0.01, 0.02, 0.05 | 5, 10 | 1, 2 |
| RMKD 816 | 500 to 200K | 0.250 | 0.05, 0.1 | 0.01, 0.02, 0.05 | 5, 10 | 1, 2 |
| RMKD 914 | 500 to 200K | 0.250 | 0.05, 0.1 | 0.01, 0.02, 0.05 | 5, 10 | 1, 2 |

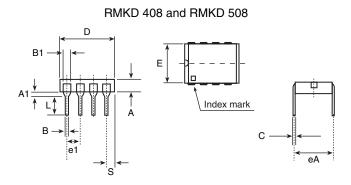
Notes

 $^{(1)}$ Per Package at +70 °C $^{(2)}$ \pm 5 ppm/°C typical at 0 °C to +70 °C, \pm 10 ppm/°C maximum at -55 °C to +155 °C

⁽³⁾ At -55 °C to +155 °C

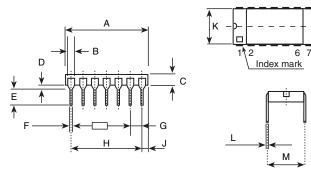
| PERFORMANCES | | | |
|-------------------------------|--|------------------------|--|
| TEST SPECIFICATIONS | | CONDITIONS | |
| CONFIGURATIONS | RMKD 408, RMKD 508, RMKD 714, RMKD 816, RMKD 914 | | |
| Stability (ΔR ratio) | < 300 ppm maximum | 2000 h at +70 °C at Pn | |
| Working voltage | 100 V _{CC} on <i>R</i> | | |
| Operating temperature range | -55 °C to +155 °C | | |
| Storage temperature range | -55 °C to +155 °C | | |
| Noise | -35 dB typical | MIL-STD-202, model 308 | |
| Thermal EMF | < 0.1 µV/°C | | |

DIMENSIONS



| DIMENSION | INCHES | MILLIMETERS |
|-----------|---------------|-----------------|
| D | 0.401 | 10.20 ± 0.10 |
| B1 | 0.046 | 1.19 |
| A1 | 0.035 | 0.89 ± 0.25 |
| А | 0.086 | 2.20 ± 0.20 |
| L | 0.129 minimum | 3.30 minimum |
| В | 0.018 | 0.46 ± 0.05 |
| e1 | 0.100 | 2.54 ± 0.10 |
| S | 0.050 | 1.27 ± 0.50 |
| E | 0.290 | 7.37 ± 0.20 |
| С | 0.009 | 0.25 ± 0.05 |
| eA | 0.300 | 7.62 ± 0.20 |

RMKD 714 and RMKD 914



| DIMENSION | INCHES | MILLIMETERS |
|-----------|--------|-----------------|
| А | 0.700 | 17.78 ± 0.20 |
| В | 0.046 | 1.19 |
| С | 0.086 | 2.20 ± 0.20 |
| D | 0.035 | 0.89 ± 0.25 |
| E | 0.129 | 3.30 |
| F | 0.018 | 0.46 ± 0.05 |
| G | 0.100 | 2.54 ± 0.10 |
| Н | 0.600 | 15.24 ± 0.10 |
| J | 0.050 | 1.27 ± 0.50 |
| К | 0.290 | 7.37 ± 0.20 |
| L | 0.009 | 0.25 ± 0.05 |
| М | 0.300 | 7.62 ± 0.20 |

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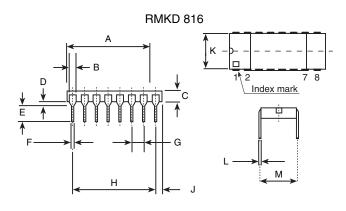
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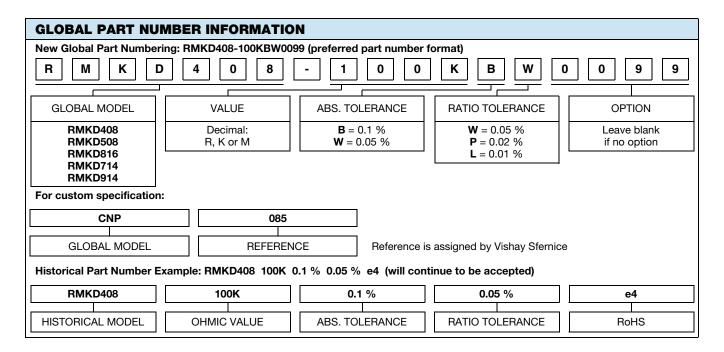
DIMENSIONS



| DIMENSION | INCHES | MILLIMETERS |
|-----------|--------|------------------|
| А | 0.799 | 20.30 ± 0.20 |
| В | 0.046 | 1.19 |
| С | 0.092 | 2.35 ± 0.20 |
| D | 0.035 | 0.89 ± 0.25 |
| E | 0.129 | 3.30 |
| F | 0.018 | 0.46 ± 0.05 |
| G | 0.100 | 2.54 ± 0.10 |
| Н | 0.700 | 17.78 ± 0.10 |
| J | 0.050 | 1.27 ± 0.50 |
| К | 0.290 | 7.37 ± 0.20 |
| L | 0.009 | 0.25 ± 0.05 |
| М | 0.300 | 7.62 ± 0.20 |

| MECHANICAL SPECIFICATIONS | | |
|---------------------------|---------------------------|--|
| Resistive material | Nichrome | |
| Passivation | Mineral passivation Si3N4 | |
| Terminals | Gold | |

Option: tin / silver plating: option 0076





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Revision: 01-Jan-2024