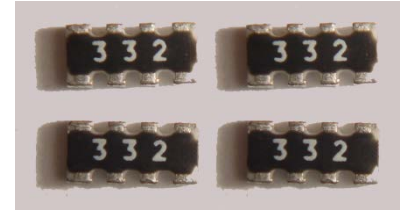
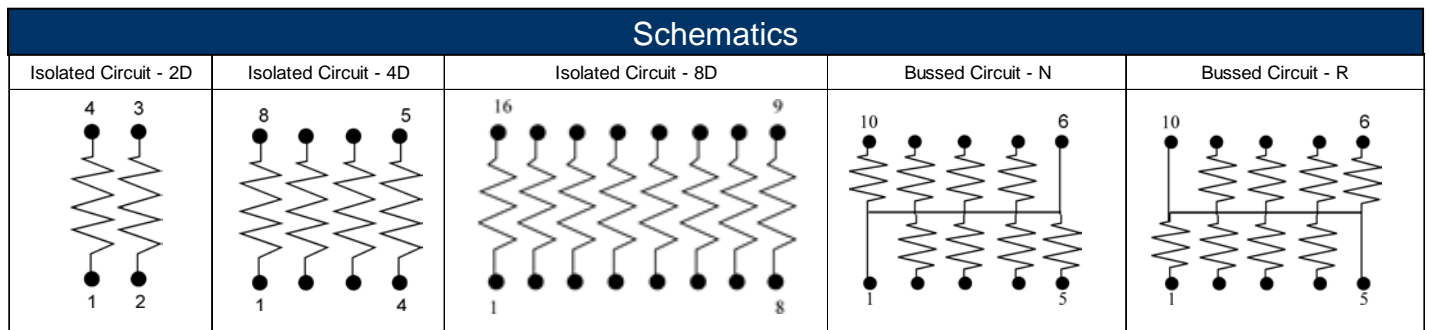


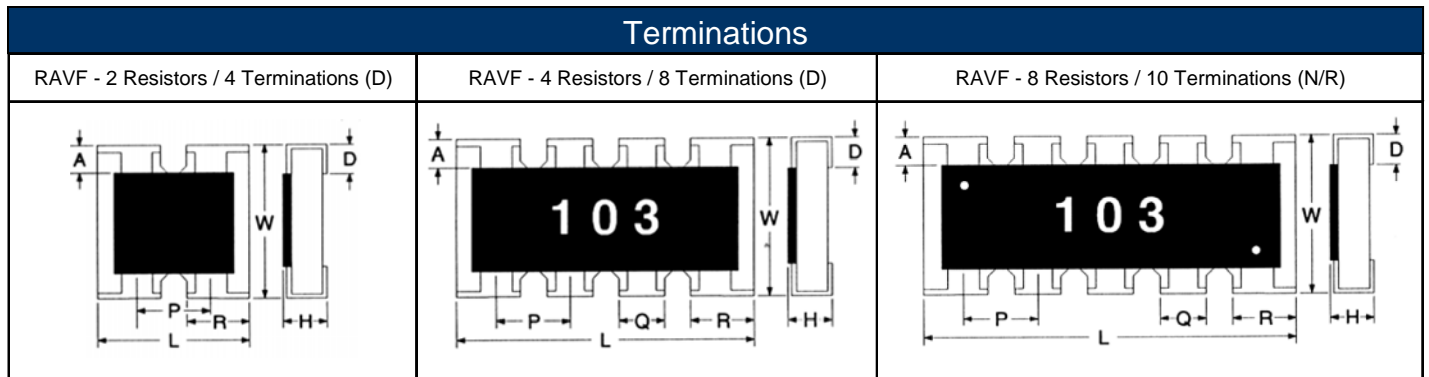
- Features:
- Thick film resistor element
 - Multiple circuit types available
 - Ideal SMD substitute for leaded networks
 - RoHS compliant / lead-free
 - Auto-placement capability
 - Square corner construction standard
 - Zero ohm jumper available
 - RAVF 324D is standard with scalloped corner
 - Styles 102D, 104D and 164D are qualified to AEC-Q200



| Electrical Specifications | | | | | | | | |
|--|-----------------------------------|------------------------------------|--|--------------------------|---|-------------------------------|-----------------------------------|----|
| Type / Code / # of Elements / Circuit Type | Power Rating (per element) @ 70°C | Power Rating (Entire Array) @ 70°C | Maximum Working Voltage ⁽¹⁾ | Maximum Overload Voltage | Resistance Temperature Coefficient | Ohmic Range (Ω) and Tolerance | | |
| | | | | | | 1% | 2% | 5% |
| RAVF052D | 0.031W | 0.063W | 12.5V | 25V | ±500 ppm/°C ±300 ppm/°C ±200 ppm/°C | - | 3 - 10 10.1 - 1K 1.01K - 1M | |
| RAVF102D | 0.063W | 0.125W | 25V | 50V | ±300 ppm/°C ±200 ppm/°C | - | 1 - 10 10 - 1M | |
| RAVF104D | 0.063W | 0.250W | 25V | 50V | ±300 ppm/°C ±200 ppm/°C | - | 1 - 10 10 - 1M | |
| RAVF162D | 0.063W | 0.125W | 50V | 100V | ±200 ppm/°C | 10 - 1M | 1 - 10M | |
| RAVF164D | 0.063W | 0.250W | 50V | 100V | ±200 ppm/°C | 10 - 1M | 1 - 10M | |
| RAVF168D | 0.063W | 0.500W | 25V | 50V | ±250 ppm/°C ±200 ppm/°C | - 10 - 1M | 1 - 1M - | |
| RAVF324D | 0.125W | 0.250W | 200V | 400V | ±200 ppm/°C | 22 - 1M | 10 - 1M | |
| RAVF328N | 0.063W | 0.500W | 25V | 50V | ±200 ppm/°C | - | 22 - 1M | |
| RAVF328R | 0.063W | 0.500W | 25V | 50V | ±200 ppm/°C | - | 22 - 1M | |

Note: (1) Lesser of $\sqrt{\text{PR}}$ or maximum working voltage.

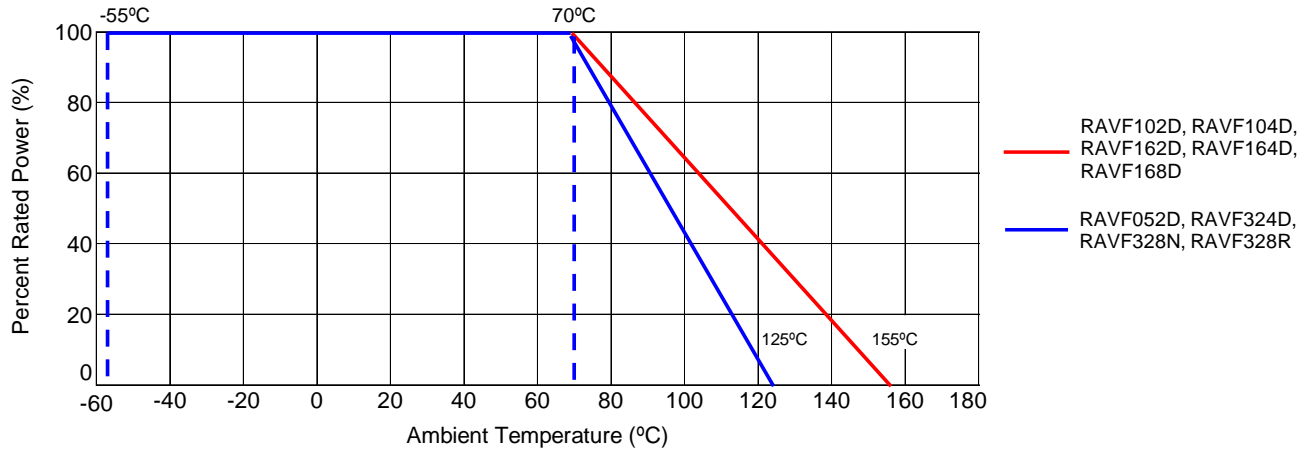




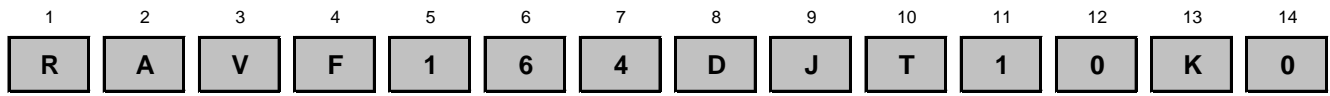
| Mechanical Specifications | | | | | | | | | |
|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| Type / Code / # of Elements / Circuit Type | L Body Length | W Body Width | H Body Height | P Element Spacing | Q Termination Width | R Termination Width | D Bottom Termination | A Top Termination | Unit |
| RAVF052D | 0.031 ± 0.004 0.80 ± 0.10 | 0.024 ± 0.004 0.60 ± 0.10 | 0.012 ± 0.002 0.30 ± 0.05 | 0.020 ± 0.006 0.50 ± 0.15 | - - | 0.014 ± 0.004 0.35 ± 0.10 | 0.006 ± 0.002 0.15 ± 0.05 | 0.006 ± 0.004 0.15 ± 0.10 | Inches mm |
| RAVF102D | 0.039 ± 0.004 1.00 ± 0.10 | 0.039 ± 0.004 1.00 ± 0.10 | 0.014 ± 0.004 0.35 ± 0.10 | 0.026 ± 0.002 0.65 ± 0.05 | - - | 0.013 ± 0.002 0.33 ± 0.05 | 0.010 ± 0.002 0.25 ± 0.05 | 0.006 ± 0.004 0.15 ± 0.10 | Inches mm |
| RAVF104D | 0.079 ± 0.008 2.00 ± 0.20 | 0.039 ± 0.006 1.00 ± 0.15 | 0.014 ± 0.006 0.35 ± 0.15 | 0.020 ± 0.006 0.50 ± 0.15 | 0.012 ± 0.004 0.30 ± 0.10 | 0.016 ± 0.004 0.40 ± 0.10 | 0.010 ± 0.004 0.25 ± 0.10 | 0.008 ± 0.004 0.20 ± 0.10 | Inches mm |
| RAVF162D | 0.063 ± 0.006 1.60 ± 0.15 | 0.063 ± 0.006 1.60 ± 0.15 | 0.020 ± 0.006 0.50 ± 0.15 | 0.031 ± 0.002 0.80 ± 0.05 | - - | 0.024 ± 0.006 0.60 ± 0.15 | 0.012 ± 0.006 0.30 ± 0.15 | 0.012 ± 0.006 0.30 ± 0.15 | Inches mm |
| RAVF164D | 0.126 ± 0.008 3.20 ± 0.20 | 0.063 ± 0.008 1.60 ± 0.20 | 0.020 ± 0.004 0.50 ± 0.10 | 0.031 ± 0.002 0.80 ± 0.05 | 0.020 ± 0.004 0.50 ± 0.10 | 0.026 ± 0.004 0.65 ± 0.10 | 0.012 ± 0.006 0.30 ± 0.15 | 0.012 ± 0.008 0.30 ± 0.20 | Inches mm |
| RAVF168D | 0.157 ± 0.008 4.00 ± 0.20 | 0.063 ± 0.006 1.60 ± 0.15 | 0.016 ± 0.004 0.40 ± 0.10 | 0.020 ± 0.006 0.50 ± 0.15 | 0.010 ± 0.004 0.25 ± 0.10 | 0.015 ± 0.004 0.38 ± 0.10 | 0.012 ± 0.008 0.30 ± 0.20 | 0.012 ± 0.008 0.30 ± 0.20 | Inches mm |
| RAVF324D | 0.200 ± 0.008 5.08 ± 0.20 | 0.122 ± 0.008 3.10 ± 0.20 | 0.022 ± 0.004 0.55 ± 0.10 | 0.050 ± 0.004 1.27 ± 0.10 | 0.031 ± 0.008 0.80 ± 0.20 | - - | 0.012 ± 0.008 0.30 ± 0.20 | 0.020 ± 0.008 0.50 ± 0.20 | Inches mm |
| RAVF328N | 0.126 ± 0.006 3.20 ± 0.15 | 0.063 ± 0.006 1.60 ± 0.15 | 0.022 ± 0.004 0.55 ± 0.10 | 0.025 ± 0.002 0.64 ± 0.05 | 0.013 ± 0.006 0.34 ± 0.15 | 0.019 ± 0.006 0.49 ± 0.15 | 0.010 ± 0.006 0.25 ± 0.15 | 0.012 ± 0.008 0.30 ± 0.20 | Inches mm |
| RAVF328R | 0.126 ± 0.006 3.20 ± 0.15 | 0.063 ± 0.006 1.60 ± 0.15 | 0.022 ± 0.004 0.55 ± 0.10 | 0.025 ± 0.002 0.64 ± 0.05 | 0.013 ± 0.006 0.34 ± 0.15 | 0.019 ± 0.006 0.49 ± 0.15 | 0.010 ± 0.006 0.25 ± 0.15 | 0.012 ± 0.008 0.30 ± 0.20 | Inches mm |

| Performance Characteristics | |
|------------------------------|---------------------------|
| Test | Test Results (JIS C 5202) |
| Load Life in Moisture | ±3% |
| Temperature cycle | ±1% |
| Load Life | ±3% |
| Resistance to Soldering heat | ±1% |
| Terminal Adhesion | ±1% |
| Short Time Overload | ±2% |

Power Derating Curve:



How to Order



| Product Series | | Size | Power | Tolerance ⁽¹⁾ | | | Packaging | | | | Resistance Value |
|----------------|----------------|------|--------|---|--------|------------|-----------|---------------|------------------|----------|---|
| RAVF | Convex RoHS | | | Code | Tol | Value | Code | Description | Size | Quantity | |
| | | 052D | 0.031W | F | 1% | E24 | T | Tape and Reel | 052D, 102D, 104D | 10,000 | Four characters with the multiplier used as the decimal holder. 10 ohm = 10R0 10.2 Kohm = 10K2 1 Mohm = 1M00 Zero ohm jumper = 0R00 |
| | | 102D | 0.063W | G | 2% | | | | 162D, 164D, 168D | 5,000 | |
| | | 104D | 0.063W | J | 5% | 328N, 328R | | | | | |
| | | 162D | 0.063W | Z | jumper | 324D | | | 4,000 | | |
| | | 164D | 0.063W | Note (1): 1% tolerance is available in E24 values only. E96 values are generally not available. Contact factory for details. | | | | | | | |
| | | 168D | 0.063W | | | | | | | | |
| | | 324D | 0.125W | | | | | | | | |
| | | 328N | 0.063W | | | | | | | | |
| | | 328R | 0.063W | | | | | | | | |

D = Isolated
N = Bussed
R = Bussed