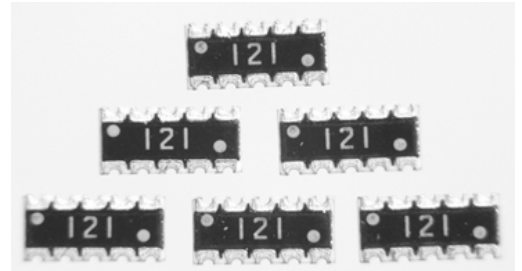


- Features:
- Thick film resistor element
 - Zero ohm available
 - Auto-placement capability
 - Multiple circuit types available
 - Ideal SMD substitute for leaded networks



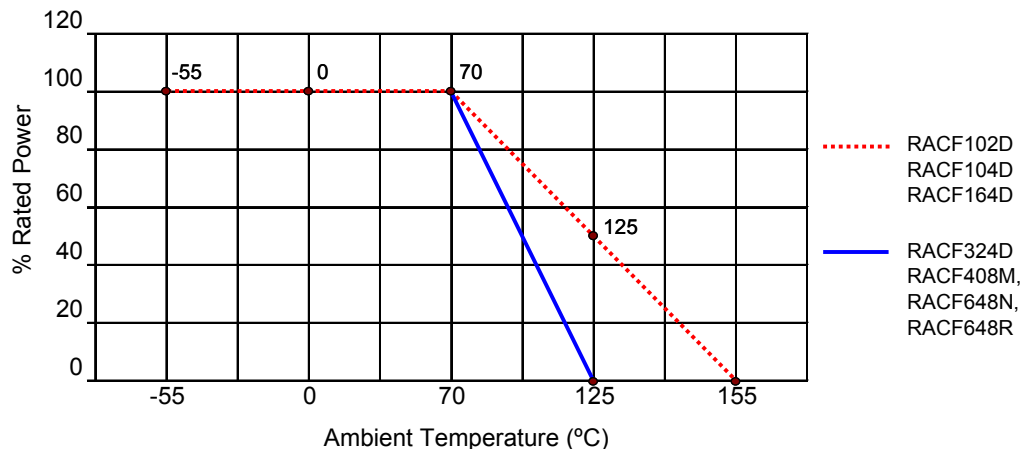
| Electrical Specifications | | | | | | | |
|--|-----------------------------------|-----------------------------|--------------------------|------------------------------------|-------------------------------|--------------------|--------------------|
| Type / Code / # of Elements / Circuit Type | Power Rating (per element) @ 70°C | Maximum Working Voltage (1) | Maximum Overload Voltage | Resistance Temperature Coefficient | Ohmic Range (Ω) and Tolerance | | |
| | | | | | 1% | 2% | 5% |
| RACF102D | 0.063W | 25V | 50V | ±650 ppm/°C ±250 ppm/°C | 3 - <10 10 - 1M | 3 - <10 10 - 1M | 3 - <10 10 - 1M |
| RACF104D | 0.063W | 25V | 50V | ±400 ppm/°C ±200 ppm/°C | 1 - <10 10 - 1M | 1 - <10 10 - 1M | 1 - <10 10 - 1M |
| RACF164D | 0.063W | 50V | 100V | ±200 ppm/°C | 1 - 1M | 1 - 10M | 1 - 10M |
| RACF324D | 0.125W | 200V | 400V | ±200 ppm/°C | 22 - 1M | - | 10 - 1M |
| RACF408M | 0.063W | 25V | 50V | ±200 ppm/°C | - | - | 22 - 1M |
| RACF648N | 0.063W | 50V | 100V | ±200 ppm/°C | - | - | 22 - 1M |
| RACF648R | 0.063W | 50V | 100V | ±200 ppm/°C | - | - | 22 - 1M |

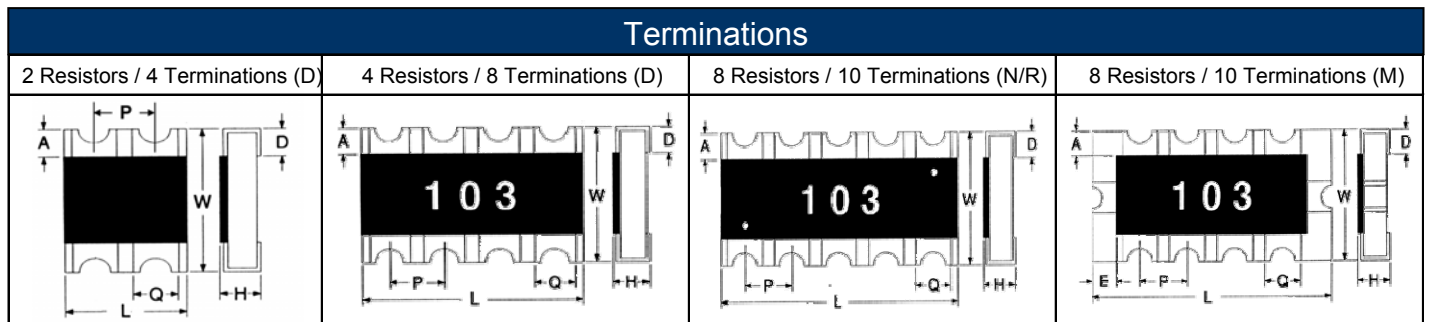
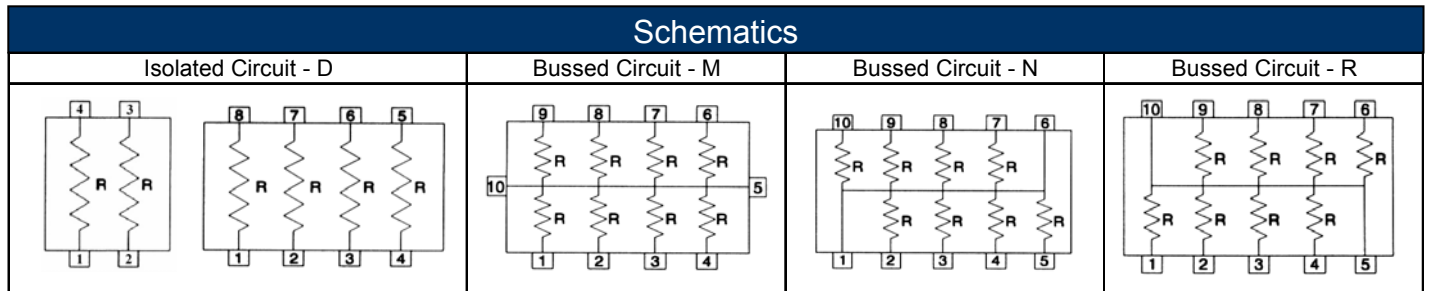
(1) Lesser of \sqrt{PR} or maximum working voltage.

| 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% |

Operating Temperature Range: RACF102D, RACF104D, RACF164D: -55°C to 155°C
All other types: -55°C to 125°C

Power Derating Curve:

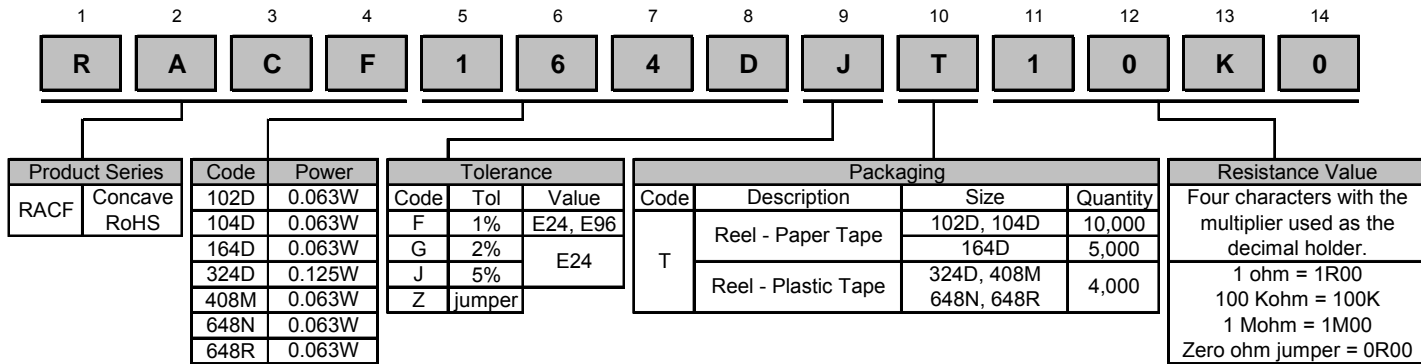




Mechanical Specifications

| Type / Code / # of Elements / Circuit Type | L Body Length | W Body Width | H Body Height | P Element Spacing | Q Termination Width | D Bottom Termination | A Top Termination | E End Termination | Unit |
|--|------------------------------|------------------------------|------------------------------|-------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| RACF102D | 0.039 ± 0.004 1.00 ± 0.10 | 0.039 ± 0.004 1.00 ± 0.10 | 0.012 ± 0.004 0.30 ± 0.10 | 0.020 0.50 | 0.012 ± 0.004 0.30 ± 0.10 | 0.010 ± 0.004 0.25 ± 0.10 | 0.007 ± 0.004 0.18 ± 0.10 | - | inches mm |
| RACF104D | 0.079 ± 0.004 2.00 ± 0.10 | 0.039 ± 0.004 1.00 ± 0.10 | 0.016 ± 1.000 0.40 ± 0.10 | 0.020 0.50 | 0.012 ± 0.004 0.30 ± 0.10 | 0.010 ± 0.004 0.25 ± 0.10 | 0.006 ± 0.004 0.15 ± 0.10 | - | inches mm |
| RACF164D | 0.126 ± 0.008 3.20 ± 0.20 | 0.063 ± 0.006 1.60 ± 0.15 | 0.024 ± 0.006 0.60 ± 0.15 | 0.031 0.80 | 0.016 ± 0.008 0.40 ± 0.20 | 0.016 ± 0.008 0.40 ± 0.20 | 0.012 ± 0.008 0.30 ± 0.20 | - | inches mm |
| RACF324D | 0.200 ± 0.008 5.08 ± 0.20 | 0.118 ± 0.008 3.00 ± 0.20 | 0.024 ± 0.004 0.60 ± 0.10 | 0.050 1.27 | 0.031 ± 0.004 0.80 ± 0.10 | 0.020 ± 0.008 0.50 ± 0.20 | 0.022 ± 0.008 0.55 ± 0.20 | - | inches mm |
| RACF408M | 0.157 ± 0.008 4.00 ± 0.20 | 0.083 ± 0.008 2.10 ± 0.20 | 0.024 ± 0.004 0.60 ± 0.10 | 0.031 0.80 | 0.020 ± 0.008 0.50 ± 0.20 | 0.016 ± 0.008 0.40 ± 0.20 | 0.010 ± 0.008 0.25 ± 0.20 | 0.012 ± 0.008 0.30 ± 0.20 | inches mm |
| RACF648N | 0.252 ± 0.008 6.40 ± 0.20 | 0.122 ± 0.008 3.10 ± 0.20 | 0.024 ± 0.004 0.60 ± 0.10 | 0.050 1.27 | 0.028 ± 0.008 0.70 ± 0.20 | 0.020 ± 0.008 0.50 ± 0.20 | 0.014 ± 0.006 0.35 ± 0.15 | - | inches mm |
| RACF648R | 0.252 ± 0.008 6.40 ± 0.20 | 0.122 ± 0.008 3.10 ± 0.20 | 0.024 ± 0.004 0.60 ± 0.10 | 0.050 1.27 | 0.028 ± 0.008 0.70 ± 0.20 | 0.020 ± 0.008 0.50 ± 0.20 | 0.014 ± 0.006 0.35 ± 0.15 | - | inches mm |

How to Order



D = Isolated
M, N, R = Bussed

Legacy Part Number (before January 3, 2011):

| SEI Type | | Code | Number of Elements | Circuit Type | Nominal Resistance | Tolerance | Packaging | | | |
|------------|-------------|-----------|--------------------|--------------|--------------------|-----------|---------------|---------|---------------|------|
| RAC | | 16 | 4 | D | 10K | 5% | R | | | |
| Type | Description | Code | Elements | Circuit Type | Tol | Values | Types | Pkg Qty | Description | Code |
| RAC | Standard | 10 | 2 | D = Isolated | 1% | E24 E96 | 102, 104 | 10,000 | Paper | R |
| RACF | RoHS | 16 | 4 | M = Bussed | 2% | E24 | 164 | 5,000 | Tape and Reel | |
| | | 32 | 8 | N = Bussed | 5% | E24 | 324, 408, 648 | 4,000 | Plastic | |
| | | 40 | | R = Bussed | | | | | Tape and Reel | |
| | | 64 | | | | | | | | |