



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

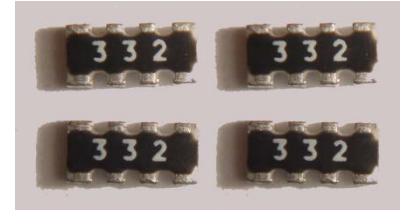
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

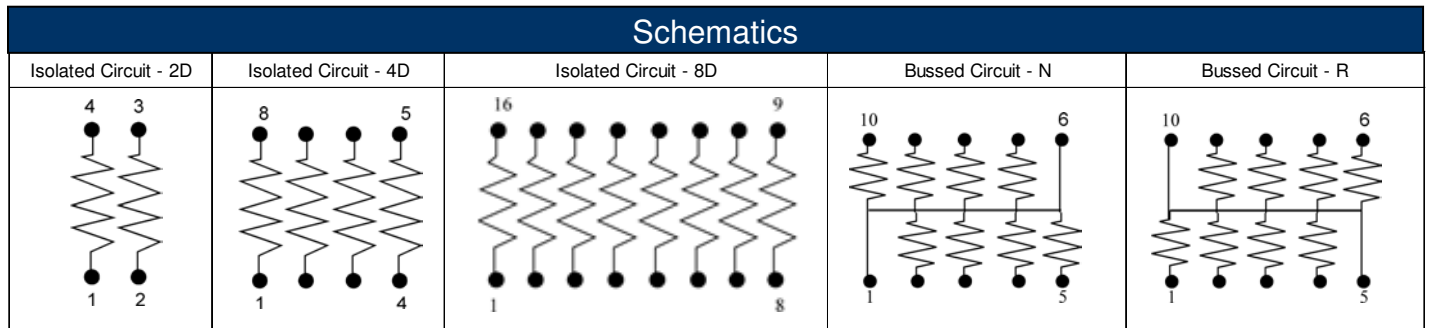


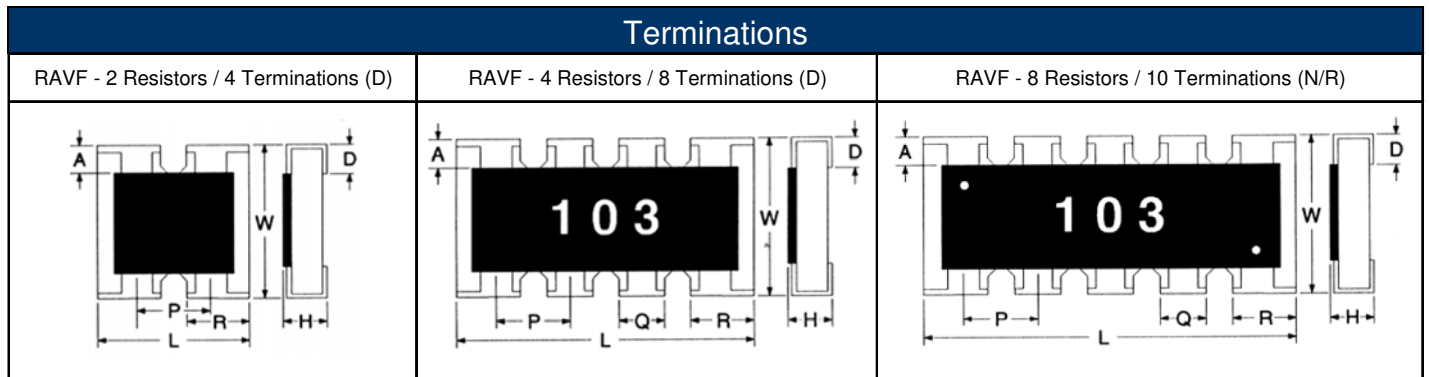
- Features:
- Thick film resistor element
  - Multiple circuit types available
  - Ideal SMD substitute for leaded networks
  - RoHS compliant
  - Auto-placement capability
  - Square corner construction standard
  - Zero ohm jumper available
  - RAVF 324D is standard with scalloped corner
  - Styles 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 <sup>(1)</sup>	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	-	1 - 1M	
							10 - 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	

(1) Lesser of  $\sqrt{P \cdot R}$  or maximum working voltage.

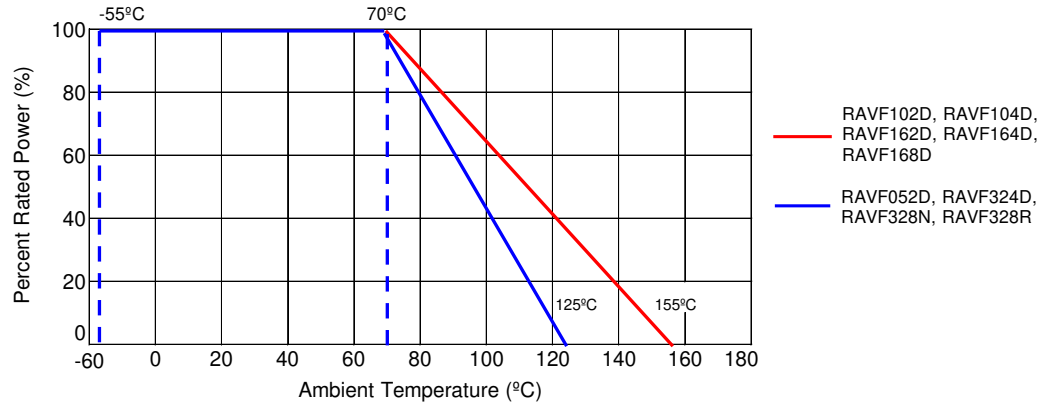




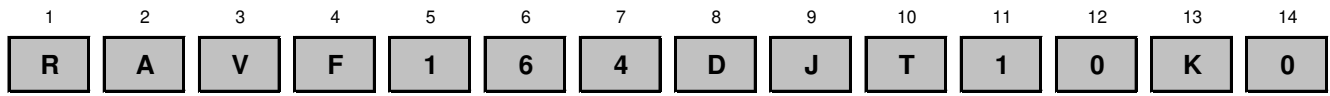
Mechanical Specifications									
Type / Code / # of Elements / Circuit Type	L Body Length	W Body Width	H Body Height	P Element Spacing	Q Termination Width	R Termination Width	D Bottom Termination	A Top Termination	Unit
RAVF052D	0.031 ± 0.004 0.80 ± 0.10	0.024 ± 0.004 0.60 ± 0.10	0.012 ± 0.002 0.30 ± 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 <sup>(1)</sup>			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%						
		104D	0.063W	J	5%						
		162D	0.063W	Z	jumper						
		164D	0.063W								
		168D	0.063W								
		324D	0.125W					324D	4,000		
		328N	0.063W								
		328R	0.063W								

Note (1): 1% tolerance is available in E24 values only.  
E96 values are generally not available. Contact factory for details.

- D = Isolated
- N = Bussed
- R = Bussed