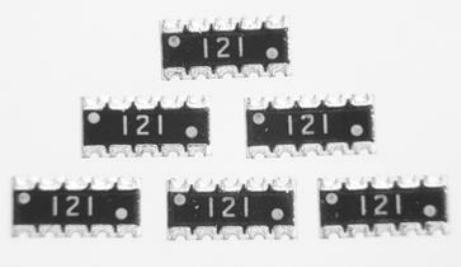
Features:

- Product will be discontinued - not recommended for new designs
- Last time buy December 1, 2020
- For more information please see our PDN here
- RAVF series of convex arrays is recommended as replacement



Electrical Specifications

Type / Code / # of Elements / Circuit Type	Power Rating (per element) @ 70ºC	Maximum Working Voltage	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance		
					1%	2%	5%
RACF102D	0.063 W	25 V	50 V	±650 ppm/ºC	3 - 9.88		
				±250 ppm/ºC	10 - 1 M		
RACF104D	0.063 W	25 V	50 V	±400 ppm/ºC	1 - 9.88		
				±200 ppm/ºC	10 - 1 M		
RACF164D	0.063 W	50 V	100 V	±200 ppm/ºC	22 - 1 M	10 - 1 M	
RACF324D	0.125 W	200 V	400 V	±200 ppm/ºC	-		10 - 1 M
RACF408M	0.063 W	25 V	50 V	±200 ppm/ºC	-		22 - 1 M
RACF648N	0.063 W	50 V	100 V	±200 ppm/ºC	-		22 - 1 M
RACF648R	0.063 W	50 V	100 V	±200 ppm/ºC	-		22 - 1 M

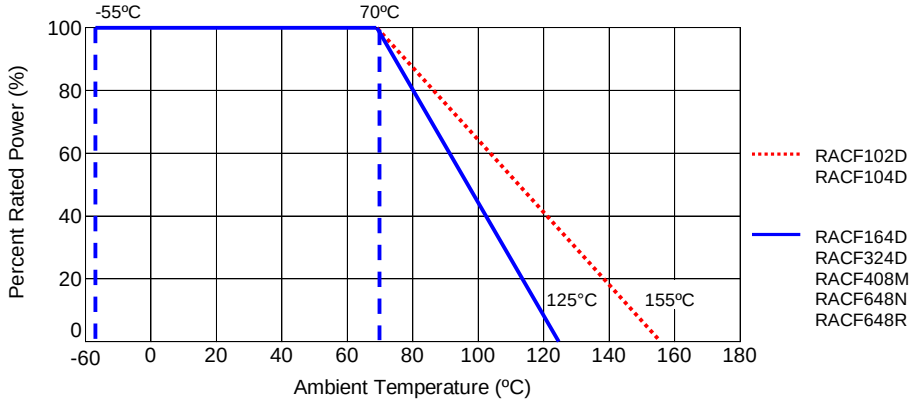
Note: (1) Lesser of √P*R or maximum working voltage.

Performance Characteristics

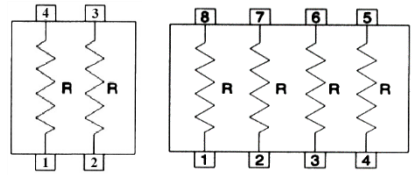
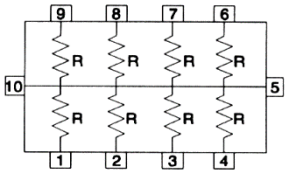
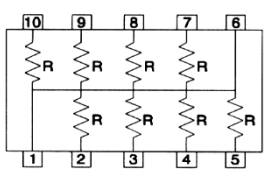
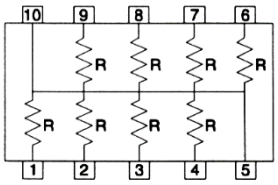
Test	Test Results (JIS C 5202)
Load Life in Moisture	± 3%
Temperature cycle	± 1%
Load Life	± 3%
Resistance to Soldering heat	± 1%
Terminal Adhesion	± 1%
Short Time Overload	± 2%

Operating Temperature Range: RACF102D and RACF104D: -55 ºC to 155 ºC
All other types: -55 ºC to 125 ºC

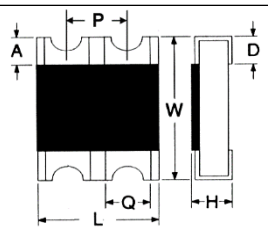
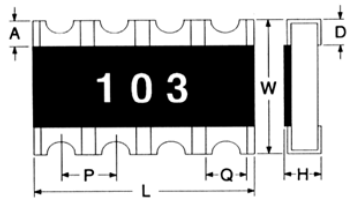
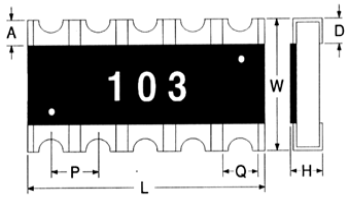
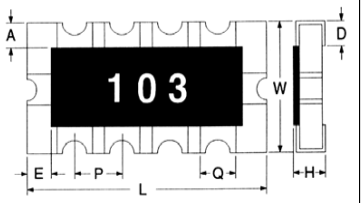
Power Derating Curve:



Schematics

Isolated Circuit - D	Bussed Circuit - M	Bussed Circuit - N	Bussed Circuit - R
			

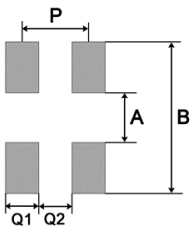
Terminations

2 Resistors / 4 Terminations (D)	4 Resistors / 8 Terminations (D)	8 Resistors / 10 Terminations (N/R)	8 Resistors / 10 Terminations (M)
			

Mechanical Specifications

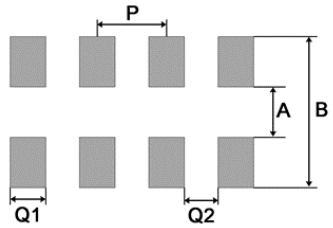
Type / Code / # of Elements / Circuit Type	L Body Length	W Body Width	H Body Height	P Element Spacing	Q Termination Width	D Bottom Termination	A Top Termination	E End Termination	Unit
RACF102D	0.039 ± 0.004 1.00 ± 0.10	0.039 ± 0.004 1.00 ± 0.10	0.012 ± 0.004 0.30 ± 0.10	0.020 0.50	0.012 ± 0.004 0.30 ± 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

Recommended Pad Layout

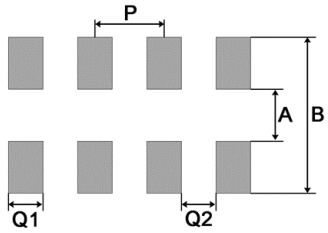


Type	A	B	P	Q1	Q2	Unit
RACF102D	0.020 0.50	0.079 2.00	0.020 0.50	0.011 0.28	0.009 0.22	inches mm

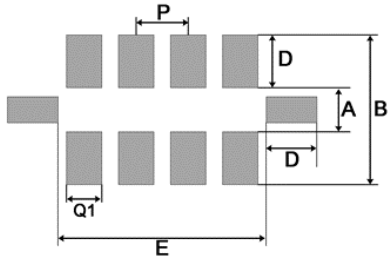
Recommended Pad Layout



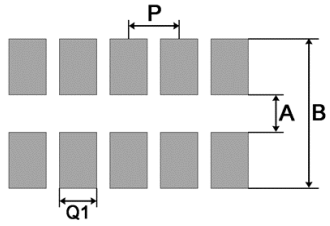
Type	A	B	P	Q1	Q2	Unit
RACF104D	0.020 0.50	0.079 2.00	0.020 0.50	0.011 0.28	0.009 0.22	inches mm



Type	A	B	P	Q1	Q2	Unit
RACF164D	0.031 0.80	0.102 2.60	0.031 0.80	0.020 0.50	0.012 0.30	inches mm
RACF324D	0.087 2.20	0.165 4.20	0.050 1.27	0.028 0.70	0.022 0.57	inches mm



Type	A	B	D	E	P	Q1	Unit
RACF408M	0.039 1.00	0.118 3.00	0.039 1.00	0.134 3.40	0.031 0.80	0.020 0.50	inches mm



Type	A	B	P	Q1	Unit
RACF648N / 648R	0.031 0.80	0.122 3.10	0.050 1.27	0.028 0.70	inches mm

RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status

Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
RACF	Thick Film Surface Mount Chip Resistor Array Concave Terminations	SMD	YES(1)	100% Matte Sn over Ni	Jan-04	04/01

Note (1): RoHS Compliant by means of exemption 7c-I.

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13	14
R	**A**	**C**	**F**	**1**	**6**	**4**	**D**	**J**	**T**	**1**	**0**	**K**	**0**

Product Series

RACF	Concave RoHS

Code	Power Rating
102D	0.063 W
104D	0.063 W
164D	0.063 W
324D	0.125 W
408M	0.063 W
648N	0.063 W
648R	0.063 W

D = Isolated
M, N, R = Bussed

Tolerance		
Code	Tol	Value
F	1%	E24, E96
G	2%	E24
J	5%	
Z	jumper	

Packaging			
Code	Description	Size	Quantity
T	Reel - Paper Tape	102D, 104D	10000
		164D	5000
	Reel - Plastic Tape	324D, 408M 648N, 648R	4000

Resistance Value
Four characters with the multiplier used as the decimal holder.
1 ohm = 1R00 100 Kohm = 100K 1 Mohm = 1M00 Zero ohm jumper = 0R00