

RAV Series—Convex Termination Chip Resistor Array

SEI

Features

- Thick film resistor element
- Multiple circuit types available
- Ideal SMD substitute for leaded networks
- RoHS compliant / lead-free available (RAVF)
- Auto-placement capability
- Square corner construction standard
- Zero ohm jumper available
- RAV 324D is standard with scalloped corner



Electrical Specifications

Type / Code / # of Elements / Circuit Type	Power Rating (per element) @ 70°C	Power Rating (Entire Array) @ 70°C	Maximum Working Voltage*	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
						1%	2%, 5%
RAV 102D	0.063W	0.125W	25V	50V	±200 ppm/°C ±250 ppm/°C ±300 ppm/°C	— 22Ω – 1MΩ —	10Ω – 1MΩ — 1.0Ω – 9.9Ω
RAV 104D	0.063W	0.250W	25V	50V	±250 ppm/°C	22Ω – 10KΩ	1.0Ω – 1MΩ
RAV 162D	0.063W	0.125W	50V	100V	±200 ppm/°C	10Ω – 1MΩ	1.0Ω – 10MΩ
RAV 164D	0.063W	0.250W	50V	100V	±200 ppm/°C	1.0Ω – 10MΩ	1.0Ω – 1MΩ
RAV 168D	0.063W	0.500W	25V	50V	±200 ppm/°C ±250 ppm/°C	10Ω – 1MΩ —	— 1.0Ω – 1MΩ
RAV 324D	0.125W	0.250W	200V	400V	±200 ppm/°C	22Ω – 1MΩ	10Ω – 1MΩ
RAV 328N	0.063W	0.500W	25V	50V	±200 ppm/°C	—	22Ω – 1MΩ
RAV 328R	0.063W	0.500W	25V	50V	±200 ppm/°C	—	22Ω – 1MΩ

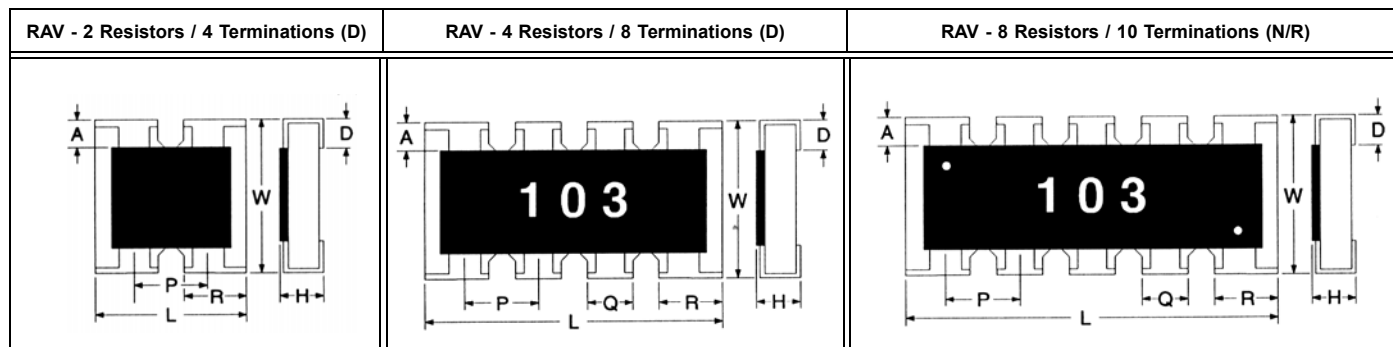
*Lesser of √PR or maximum working voltage.

Schematics

Isolated Circuit - 2D	Isolated Circuit - 4D	Isolated Circuit - 8D	Bussed Circuit - N	Bussed Circuit - R

How to Order

RAV		16	4	D	10K		5%	R		
SEI Type		Code	# of Elements	Circuit Type	Nominal Resistance		Tolerance	Packaging		
SEI Type	Description	Code	Elements	Circuit Type	Tolerance	Values	SEI Types	Pkg Qty	Description	Code
RAV	Convex	10	2	D = Isolated	1%	E24	102D, 104D	10,000	Reel	R
RAVF	Convex RoHS	16	4	N = Bussed	2%	E24	162D, 164D, 168D, 328N, 328R	5,000		
		32	8	R = Bussed	5%	E24	324D	4,000		



Mechanical Specifications									inches mm
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	
RAV 102D	0.039 ± 0.004 1.00 ± 0.10	0.039 ± 0.004 1.00 ± 0.10	0.014 ± 0.002 0.35 ± 0.05	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	
RAV 104D	0.079 ± 0.008 2.00 ± 0.20	0.039 ± 0.006 1.00 ± 0.15	0.014 ± 0.004 0.35 ± 0.10	0.020 ± 0.006 0.50 ± 0.15	0.012 ± 0.006 0.30 ± 0.15	0.016 ± 0.006 0.40 ± 0.15	0.010 ± 0.004 0.25 ± 0.10	0.006 ± 0.004 0.15 ± 0.10	
RAV 162D	0.063 ± 0.006 1.60 ± 0.15	0.063 ± 0.006 1.60 ± 0.15	0.020 ± 0.006 0.50 ± 0.10	0.031 ± 0.002 0.80 ± 0.05	—	0.024 ± 0.006 0.60 ± 0.15	0.010 ± 0.004 0.25 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	
RAV 164D	0.126 ± 0.004 3.20 ± 0.10	0.063 ± 0.004 1.60 ± 0.10	0.020 ± 0.004 0.50 ± 0.10	0.031 ± 0.002 0.80 ± 0.05	0.016 ± 0.006 0.40 ± 0.15	0.024 ± 0.006 0.60 ± 0.15	0.010 ± 0.006 0.25 ± 0.15	0.012 ± 0.008 0.30 ± 0.20	
RAV 168D	0.158 ± 0.008 4.0 ± 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	0.012 ± 0.004 0.30 ± 0.10	0.016 ± 0.004 0.40 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	0.012 ± 0.008 0.30 ± 0.20	
RAV 324D	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	
RAV 328N	0.126 ± 0.008 3.20 ± 0.20	0.063 ± 0.008 1.60 ± 0.20	0.020 ± 0.004 0.50 ± 0.10	0.025 ± 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	
RAV 328R	0.126 ± 0.008 3.20 ± 0.20	0.063 ± 0.008 1.60 ± 0.20	0.020 ± 0.004 0.50 ± 0.10	0.025 ± 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	

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 : -55°C to +150°C