

AEC-Q200 Qualified Standard Thick Film Chip Resistors Combine Sulfur Resistance With Long Term Stability in Five Compact Case Sizes for Automotive, Industrial, and Telecommunications Applications

Product Benefits:

- AEC-Q200 qualified
- Sulfur withstand capability in accordance with ASTM B809-25, demonstrating a maximum resistance drift of 1 % after 1000 h at 60 °C
- High stability across challenging environmental conditions, with $\Delta R/R \leq 1\%$ after 1000 h of rated power at 70 °C
- Available in 0201, 0402, 0603, 0805, and 1206 case sizes
- Power ratings up to 0.25 W
- Operating voltage range from 30 V to 200 V
- Wide resistance range from 10 Ω up to 10 M Ω , with tolerances down $\pm 1\%$
- TCR down to 100 ppm/K
- Suitable for automatic soldering using wave, reflow, or vapor phase
- RoHS-compliant and halogen-free



Market Applications:

- Automotive, industrial, and telecommunications applications

The News:

Vishay Intertechnology introduces a new series of AEC-Q200 qualified standard thick film chip resistors. The RCA-SR e3 series combines proven sulfur resistance with long term stability in five compact case sizes for automotive, industrial, and telecommunications applications.

- Designed for use in sulfur-containing environments
- Competing devices are tested for sulfur resistance at the same temperature as the RCA-SR e3 series, but for shorter duration
- The devices feature a protective coating designed for electrical, mechanical, and climatic protection
- The resistors' pure matte tin plating provides compatibility with lead (Pb)-free and lead-containing soldering processes



The Key Specifications:

Part number	RCA0201-SR e3	RCA0402-SR e3	RCA0603-SR e3	RCA0805-SR e3	RCA1206-SR e3
Case size	0201	0402	0603	0805	1206
Resistance range	10 Ω to 1 M Ω ; jumper (0 Ω)	10 Ω to 10 M Ω ; jumper (0 Ω)			
Resistance tolerance	$\pm 1\%$; $\pm 5\%$				
TCR	± 200 ppm/k	± 100 ppm/K; ± 200 ppm/K			
Power rating P ₇₀	0.05 W	0.1 W	0.125 W	0.25 W	0.25 W
Operating voltage	30 V	75 V	75 V	150 V	200 V
Operating temperature range	-55 °C to +155 °C				

Availability:

Samples and production quantities of the RCA-SR e3 series are available now, with lead times of 12 weeks.

To access the product datasheet on the Vishay Website, go to

<http://www.vishay.com/ppg?20132> (RCA-SR e3)

Contact Information:

THE AMERICAS

Paulo Adabo
paulo.adabo@vishay.com

EUROPE

Ove Hach
ove.hach@vishay.com

ASIA/PACIFIC

Mike Phua
mike.phua@vishay.com