

PRODUCT EXTENSION RELEASE

RESISTORS



Bourns Releases AEC-Q200 Compliant/Automotive Grade Thick Film Resistor Product Extension CR01005A-AS Series

Riverside, California - July 10, 2025 — Bourns is pleased to announce the extension of its CR-A-AS series. The new <u>CR01005A-AS series</u> features an ultra-compact package size in a sulfur-resistant design (ASTM B-809). This series is AEC-Q200 compliant and automotive grade.

The CR01005A-AS Series supports a resistance range from 1 Ω to 1 M Ω with available tolerances of ± 1 % and ± 5 %. The product features power derating from +70 °C and offers a minimum TCR of ± 200 ppm/°C. It also supports a jumper function and has passed the relevant AEC-Q200 and UL flammability tests.

With dimensions of only 0.4 mm x 0.2 mm x 0.13 mm, this model is ideal for applications requiring miniaturization, high reliability, and the ability to operate in certain harsh environments. The enhanced sulfur-resistant design feature helps to further increase system stability and reliability.

Model Name	Dimensions (mm)	Rated Power (W)	Resistance Range	Operating Temperature	Tolerance	TCR
CR01005A-AS	0.4 x 0.2 x 0.13	0.03125	1Ω to $1M\Omega$	-55 °C to +125 °C	±1 %, ±5 %	Min. ±200 PPM/°C

Please visit the Bourns website at www.bourns.com for additional product details and contact Bourns Customer Service/Inside Sales if you have any questions.

Features

- Thick film technology
- Power rating up to 1 watt @ 70 °C
- RoHS compliant*
- Halogen free**
- Sulfur-resistant design (ASTM B-809)
- AEC-Q200 compliant
- AUTOMOTIVE

Applications

- High-density integrated designs
- Wearable devices
- Smartwatches
- Diverse environment applications
- Fitness trackers
- Smartphones

Additional Information





SELECTOR



LIBRARY



INVENTORY





CONTACT

N2509

^{*} RoHS Directive 2015/863, Mar 31, 2015 and Annex

^{**}Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.