



The DNA of tech.™

AY1 Series Ceramic Single-Layer Capacitor Automotive Grade Ceramic Disc Capacitors Offer Higher Reliability and Safety Margins for On-Board EMI Filtering



ADVANTAGE

The AY1 is an industry-first Y1 ceramic automotive safety capacitor, rated to 500 V_{AC}, and meeting the future requirements of on-board circuits

KEY PRODUCT FEATURES

- ✓ AEC-Q200 qualified and PPAP available
- ✓ Can pass 10 kV pulses (10 per polarity)
- ✓ Withstand 85 / 85 / 1000 h test



MARKETS & APPLICATIONS



MOBILITY

- AC line filtering
- On-board chargers for EVs and PHEVs
- DC/DC converters for EVs and PHEVs
- Battery management systems (BMS)
- High-voltage coolant heaters (HVCH)
- E-compressors
- Traction inverters

RESOURCES



[Product Page](#)



[Contact Us](#)



[Application Notes](#)



[Infographics](#)



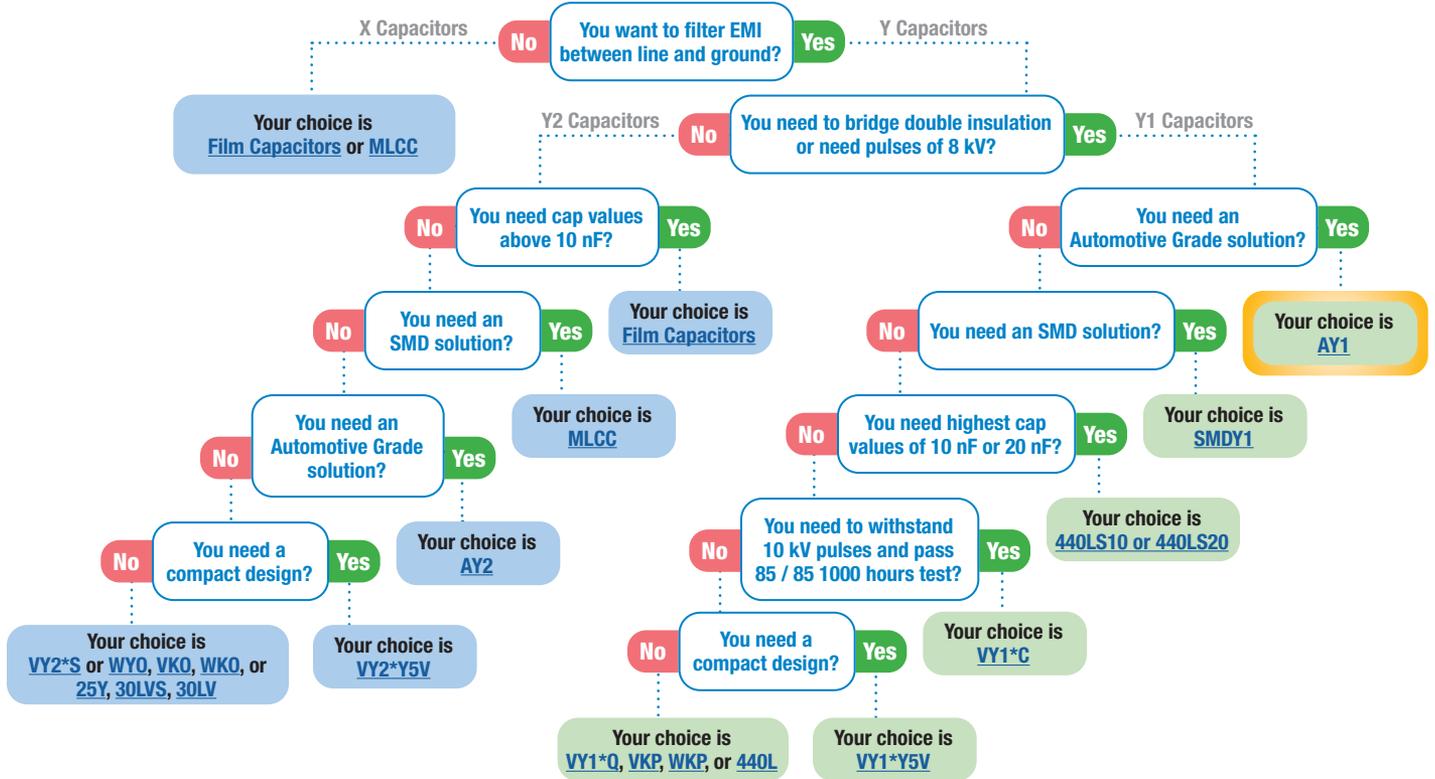
[3D Models](#)



[Models](#)

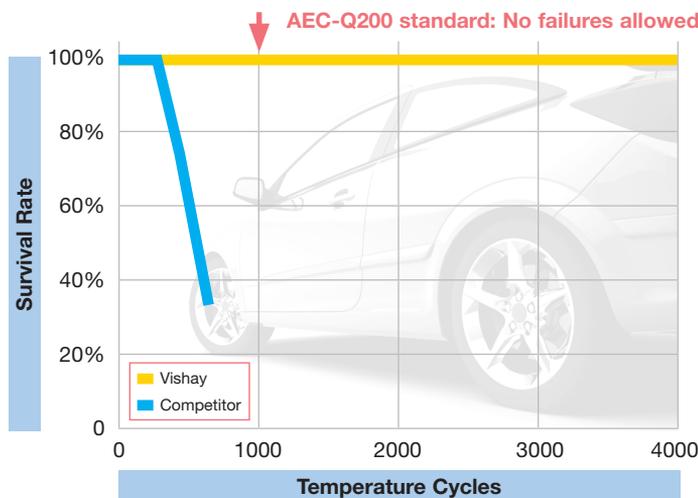
THROUGH-HOLE CERAMIC SAFETY CAPACITORS DECISION TREE

KEY: ■ X1 / Y1 Capacitor ■ X1 / Y2 Capacitor



TEMPERATURE CYCLE TEST

Temperature Cycle Test against Y1 standard safety capacitor from competition



↓ AEC-Q200 standard: No failures allowed

Conditions:

- Temperature cycles between -55 °C and 125 °C
- No defects or abnormalities are allowed
- No failure at 1.5 kV_{AC} for 60s



Vishay AY1

AY1 series safety capacitors are a unique product on the market. Please contact us if you would like to **purchase** or **order** samples.