





During the last years the electronic content in vehicles has increased significantly in Infotainment systems (connectivity) and ADAS (safety application like RADAR, LIDAR, sensors, cameras). These double-digit growth application will continue challenging the components manufacturers to introduce high reliability products with ultra extended mission profiles up to 15years.

#### **Key Products**

- KEMET T597 Series Organic Capacitor (KO-CAP®) Polymer small size
- KEMET T598 Series Organic Capacitor (KO-CAP®) Polymer
- YAGEO AC Series Automotive Grade Anti-Sulfurated Chip Resistor
- YAGEO PE Series Metal Current Sensor Low TCR Chip Resistor
- YAGEO AT Series Automotive Grade Thin Film Chip Resistor
- YAGEO AC Series Automotive Grade MLCC



T597 Series



T598 Series



**AC Series** 

PE Series



AT Series



AC Series







### KEMET Organic Capacitor (KO-CAP®) - Automotive Grade Polymer

During the last years the electronic content in vehicles has increased significantly in Infotainment systems (connectivity) and ADAS (safety application like RADAR, LIDAR, sensors, cameras). These double-digit growth application will continue challenging the components manufacturers to introduce high reliability products with ultra extended mission profiles up to 15years.

#### **Key Products**

- KEMET T597 Series Organic Capacitor (KO-CAP®) Polymer small size
- KEMET T598 Series Organic Capacitor (KO-CAP®) Polymer

#### **Key Features**

- AEC-Q200 Qualification
- Case size offering from EIA3216 to EIA7343
- Full rated voltage Range (2,5V 75V)
- High Ripple Capability

#### **Key Applications**

- Infotainment / Connectivity Systems
- Autonomous Driving / ADAS (Radar, LIDAR, Cameras, sensors, autonomous driving)

#### **Key Benefits**

- Ultra Extended Life Time under typical applications (15years)
- High Volumetric Efficiency
- No piezo effect or Capacitance Loss with bias











### YAGEO AC Series - Automotive Grade Anti-Sulfurated Chip Resistor

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#### **Key Features**

- AEC-Q200 qualified and PPAP ready
- IATF 16949 certified
- Board flex ≥2 mm
- 100% AOI
- High reliability

#### **Key Benefits**

- TC: X7R, NPO and X8R (-55°C~150°C)
- Capacitance range: 0.47 pF 10 μF
- ±5% / ±10% tolerance
- Case size: 0201 ~ 1812Voltage range: 6.3 V 1 kV

#### **Key Applications**

- IAII general-purpose applications
- Entertainment
- Comfort and security
- Information
- Resources









### YAGEO PE Series - Metal Current Sensor - Low TCR Chip Resistor

During the last years the electronic content in vehicles has increased significantly in Infotainment systems (connectivity) and ADAS (safety application like RADAR, LIDAR, sensors, cameras). These double-digit growth application will continue challenging the components manufacturers to introduce high reliability products with ultra extended mission profiles up to 15years.

#### **Key Features**

- AEC-Q200 qualified
- Excellent current sensing performance
- Low power consumption
- Low thermal EMF (≤0.3 uV/°C)
- Operation temperature from -55°C to +170°C
- Low resistances applied to current sensing

#### **Key Benefits**

TCase size: 01005-4527

■ Tight tolerance: ±0.1%, ±0.5%, ±1%, ±5%

Low TCR down to ±50 ppm/°C

Resistance: 5 mΩ - 1Ω

■ Power rating: 1/32W ~ 7W

#### **Key Applications**

- Consumer goods
- Computer
- Telecom / Datacom
- Industrial / Power supply
- Automotive
- Alternative energy









### YAGEO AT Series - Automotive Grade Thin Film Chip Resistor

During the last years the electronic content in vehicles has increased significantly in Infotainment systems (connectivity) and ADAS (safety application like RADAR, LIDAR, sensors, cameras). These double-digit growth application will continue challenging the components manufacturers to introduce high reliability products with ultra extended mission profiles up to 15years.

#### **Key Features**

- AEC-Q200 qualified, Production Part Approval Process (PPAP) available
- Superior resistance against sulfur-containing environments (according to ASTM B809-95)
- High precision and stability
- Low TCR, low electrical noise

#### **Key Benefits**

- Temperature Cycling: ±0.1%
- Anti-FOS: ±4% (105°C, 750 hours)
- Life/Endurance: ±0.1% (70°C), ±0.3% (125°C)
- Biased Humidity (85°C/85% RH): ±0.1%
- Applications

#### **Key Applications**

- Automotive electronics
- Industrial and medical equipment
- Test and measuring equipment
- Telecommunication
- Power system









### **YAGEO AC Series - Automotive Grade MLCC**

During the last years the electronic content in vehicles has increased significantly in Infotainment systems (connectivity) and ADAS (safety application like RADAR, LIDAR, sensors, cameras). These double-digit growth application will continue challenging the components manufacturers to introduce high reliability products with ultra extended mission profiles up to 15years.

#### **Key Features**

- AEC-Q200 qualified and PPAP ready
- IATF 16949 certified
- Board flex ≥2 mm
- 100% AOI
- High reliability

#### **Key Benefits**

- TC: X7R, NPO and X8R (-55°C~150°C)Capacitance range: 0.47 pF 10 μF
- ±5% / ±10% tolerance
  Case size: 0201 ~ 1812
  Voltage range: 6.3 V 1 kV

#### **Key Applications**

- All general-purpose applications
- Entertainment
- Comfort and security
- Information

