# **Panasonic INDUSTRY**



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#### Line Extension

#### ETQ-P4MR47KVK Automotive Power Inductor

Panasonic's Newest AEC-Q200 Compliant Surface Mount Automotive Power Inductor with High Rated Current for Enhanced Performance Suitable for Automotive ECUs



Panasonic, a worldwide leader in Inductor Products, announces the new ETQ-P4MR47KVK Power Inductor, part of the LP (Low Profile) Type Series of Power Choke Coils. This new Inductor provides exceptional large current support, high heat resistance, and high vibration resistance. At 8.5x8.0x4.0mm, this surface mount Power Inductor is part of the industry's smallest class of SMT Inductors and meets the market demands for smaller automotive ECU's (Electronic Control Unit) enabling them to be directly mounted on engines while achieving excellent heat and vibration resistance.

The compact and highly reliable surface mount ETQ-4MR47KVK improves the reliability of power circuits while contributing to the reduction of environmental impact by saving space in power circuit mounting areas. Panasonic's ETQ-4MR47KVK Power Inductor offers large current support 22.5A, DC current which causes a temperature rise of 40K. Parts are soldered by reflow on multilayer PWB with high heat dissipation performance. Note: Heat radiation constant is approx. 36 K/W measured. The ETQ-4MR47KVK Power Inductor provides high heat resistance of 155°C/2000 hours and vibration resistance of 5 Hz to 2 kHz/5 G, making it compatible with mechatronics.

#### **Features and Benefits**

- Small Size: Width 8.5 mm x Depth 8.0mm x Height 4.0 mm
- Heat Resistance: 155°C/2000 hours
- Vibration Resistance: 5 Hz to 2 kHz/5G
- No Internal Joint Direct Lead Terminal
- Excellent Inductance Stability Over Broad Temperature Ranges
- Compact SMD, Ferrite type comparison Up to 40% Smaller
- Low DCR and High Reliability Due to Coil Lead Direct Output Structure
- Achieves High Heat Dissipation by an Integrated Structure with a Unique Low-loss Metallic Magnetic Material
- AEC-Q200 and RoHS Compliant

### **Industries**

- Automotive
- Transportation
- Industrial

## **Applications**

- Filter DC/DC Converters for Various Automotive Applications: - ABS, EPS, Fan, Pump, and More
- High-performance Automotive ECU Power Circuits



