



## SMART GRID

### TLR Current Detecting Resistor



In smart grid applications, power conversion from DC, typically from solar panels, to mains AC is a critical process. Several elements requiring precision components existing in circuits for current sense and voltage measurement. These are found both in the DC chopper circuit feeding the DC-AC inverter as well as on the output side of the inverter.

KOA has several high reliability components for these applications including the TLR current sense series and the new transient tolerant thick film precision RS73 series for voltage measurement.

#### Key Features

- 0.5 mΩ to 20 mΩ
- Current ratings up to 100 A
- T.C.R.: ±50 / ±75 ppm/K
- Operating Temperatures up to +170°C

#### Key Applications

- Power control
- Precision current measurement
- DC-DC conversion

#### Key Benefits

- 0.7 mm low profile height
- Special no 'hotspot' trimming for high reliability
- Low parasitic inductance





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### RS73 High Precision Detection



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#### Key Features

- $\pm 0.1\%$  to  $\pm 1\%$  tolerances available
- $\pm 25$  ppm/K,  $\pm 50$  ppm/K
- ESD tolerant
- AEC-Q200 tested

#### Key Applications

- Precision electronic circuits
- Automotive electronics
- Industrial instrumentation
- Test equipment

#### Key Benefits

- $\pm 0.2\%$  ~ Long term stability
- ESD stable
- Ideal for applications where thin film is not suitable

