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# VOLA617A Phototransistor Optocoupler

## Automotive Grade Part Delivers High Isolation Voltage Ratings for 800 V EV Batteries

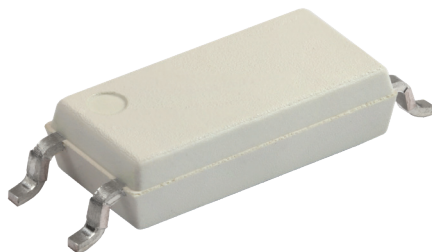


### ADVANTAGE

Offers isolation voltage of 5000 V<sub>RMS</sub>, V<sub>IOTM</sub> of 8000 V<sub>peak</sub>, V<sub>IORM</sub> of 1414 V<sub>peak</sub>, and V<sub>IOWM</sub> of 1000 V<sub>RMS</sub> in a low profile 4-pin LSOP package.

### KEY PRODUCT FEATURES

- ✓ Creepage and clearance distances of  $\geq 8$  mm
- ✓ Operating temperature range: -40 °C to +125 °C
- ✓ AEC-Q102 qualified
- ✓ Available in four current transfer ratio (CTR) ranges
- ✓ High 80 V collector-emitter voltage rating allows for more design flexibility
- ✓ High common mode transient immunity



### RESOURCES



### MARKETS AND APPLICATIONS



#### MOBILITY

- Automotive electrification (e-powertrain)



#### INDUSTRIAL

- Automation

### ADDITIONAL BENEFITS

- Galvanic and noise isolation
- Long term isolation reliability - the device consists of an infrared emitting diode optically coupled to a phototransistor detector in a low profile package
- While most automotive optocouplers cannot be used for battery voltages exceeding 500 V – limiting them to traditional 400 V EV platforms – the ability of the VOLA617A to isolate DC voltages up to 1000 V enables its use in next-generation high voltage EV architectures