15-mm Wide ACNT Optocouplers for High Voltage Applications

Introduction

The Broadcom® ACNT family of optocouplers offers 15-mm creepage and 14.2-mm clearance for high voltage isolation applications. These optocouplers provide 2,262 V_{PEAK} working insulation voltage and 12,000 V_{PEAK} transient overvoltage in a compact stretched, surface-mount SO-8 package. The ACNT optocouplers consist of comprehensive product types to meet the different galvanic isolation requirements and features. They include following:

- ACNT-H343 gate drive optocoupler
- ACNT-H61L low-power 10 MBd digital optocoupler
- ACNT-H790/H79A/H79B high linearity isolation amplifier for current sensing
- ACNT-H870/H87A/H87B voltage sense optocoupler
- ACNT-H50L/H511 low speed analog optocoupler

For example, the three-phase inverter converts DC-AC power to a load (motor); Figure 1 highlights the various isolation locations and the purpose of each ACNT optocoupler product type. The ACNT optocouplers are easy to use and are reliable.
To read the whole whitepaper, please register here.