

Compact, Safety Compliant, Current Sense Transformers

by Pulse Power Team on 04/24/2020

Pulse expands its range of surface mount current sense transformers with the introduction of its first safety standard compliant products with high isolation and enhanced insulation.

Using the Pulse patented sidecar construction developed for our [high isolation transformer series](#), the PH9500 series utilizes this unique packaging style to offer basic insulation with 8.2mm creepage in a 14x13x8.8mm form factor. The rated current is 10Arms and with turns ratios of 1:65 and 1:100 are available. Please see [PH9500 data sheet](#) for further details.

The PH9505 uses a unique construction where the primary winding which is molded into the plastic base forming a solid insulation barrier. This allows the part to be compact, 13.6x12.8x14.4mm, and achieve reinforced insulation per IEC60664/IEC60950-1 for a working voltage up to 300Vrms. The low DCR primary allows for a rated current of 30Arms with a range of turns ratios from 1:50 to 1:180. Please see the [PH9505 datasheet](#) for further details.

"Our existing product line for surface mount current sense transformers, including the ever popular PA1005 EE5 series, remain the component of choice for applications that require just functional insulation. However, many emerging applications require at least basic insulation, particularly where current needs to be measured across different ground planes. This is a typical requirement for EV applications with high voltage battery packs. The AEC-Q200 qualification of both platforms make these automotive ready solutions."

Gerard Healy | Power PBU, Pulse Electronics

The high current rating of these compact solutions are well suited to high performance applications such as battery management, power conversion, inverter drive and motor control. To see Pulse's complete line of Surface Mount Current Sense Magnetics please see our [product overview](#).