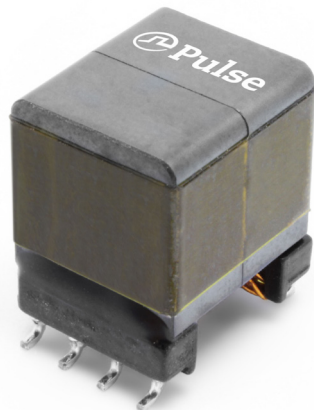
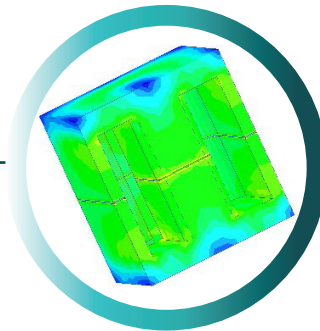




SWITCH MODE POWER TRANSFORMERS

EP7+ (PA5099, PA5100) AND EP10+ (PA5130, PA5131)

The EP core platform has become a defacto industry standard for DC/DC power applications due to its relatively compact size, inherent self-shielding and suitability for PoE applications such as VoIP phones, security cameras and infotainment devices. However, as power demands increase and board real estate has become more precious the standard platforms are unable to meet the new power density expectations. Pulse's new EP7+ and EP10+ platforms solve this issue by keeping the same industry standard footprint but utilize an optimized core structure to enable >2x the through-power. This improvement allows for greater power density, higher efficiency and better thermal performance. The catalog designs are available for both 9-57v and 36-57v inputs for active clamp forward and continuous mode flyback topologies. The transformers range from 17W to 35W in power have a primary side winding to power the controller IC and two output windings delivery either 3.3v, 5.0v, 10v, 12v, or 24v.



FEATURES & BENEFITS

- Optimized Construction to Maximize Power Density
- Power Density up to 11.6W/cm³
- 70% More Through Power than standard platform
- Suitable for PoE, Datacom and Industrial Applications
- Flybacks (17W and 25W) and Forwards (27W and 35W)
- Multiple Turns Ratios for 3.3v, 5.0v and 12.0v outputs
- Input Voltage Ranges of 33-57v and 9-57v
- Functional Insulation, 2250Vdc Isolation

SWITCH MODE POWER TRANSFORMERS

EP7+ (PA5099, PA5100) AND EP10+ (PA5130, PA5131)



Pulse Series	PA5099.XXXNLT	PA5100.XXXNLT	PA5130.XXXNLT	PA5131.XXXNLT
Platform size	EP7+ 13.6 X 11.0 X 15.5 mm Max		EP10+ 15.1 x 13.0 x 15.0 mm Max	
Power	17W	27W	25W	35W
Topology	CM Flyback	Active Clamp Forward	CM Flyback	Active Clamp Forward
Input Voltage	9-57v or 33-57v	9-57 or 33-57v	9-57 or 33-57v	9-57 or 33-57v
Output Voltages	2 x 3.3 volts 2 x 5.0 volts 2 x 12.0 volts	2 x 3.3 volts 2 x 5.0 volts 2 x 12.0 volts	2 x 3.3 volts 2 x 5.0 volts 2 x 12.0 volts	2 x 3.3 volts 2 x 5.0 volts 2 x 12.0 volts

1

Vin Range

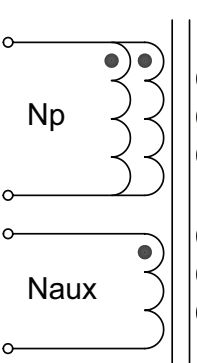
200kHz

2

3

10v/50mA

4



Np

Naux

8

Nsec

Vout/xxW

5

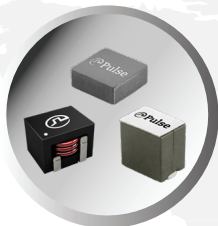
7

Nsec

Vout/xxW

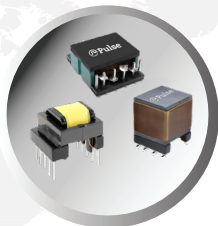
6

Other Great Products from Pulse Electronics



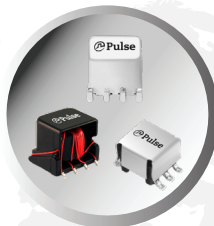
Power Inductors

- Power Bead, Molded, Composite, Drum Core and Toroid Constructions
- Over 100Apk



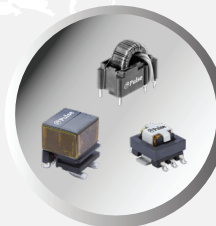
Switch Mode Transformers

- Multiple Topologies
- Up to 2kW
- Functional, Basic and Reinforced Insulation



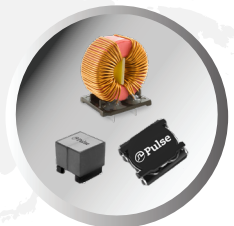
Isolation Transformers

- Push-pull, Flyback and H-Bridge topologies
- Functional, Basic and Reinforced Insulation
- Up to 5kVrms Hi-pot*



Current Sense Magnetics

- Functional, Basic and Reinforced Insulation
- Up to 40Arms



Common Mode Chokes

- NiZn, MnZn and Nanocrystalline Materials
- Up to 45Arms

Surface Mount and Through-hole Terminations Catalog and Custom Solutions Available

See Other Great Products from Pulse Electronics at Power.PulseElectronics.com