

BMS Pulse Transformer CEP99 / CEP99B



Features

- SMD type (9mm square)
- High withstand voltage: DC 3500V @ 60sec (Master – Slave use)
- High reliability (Metal terminal structure: Coplanarity $\leq 0.15\text{mm}$)
- Operating temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- AEC-Q200 / RoHS compliant

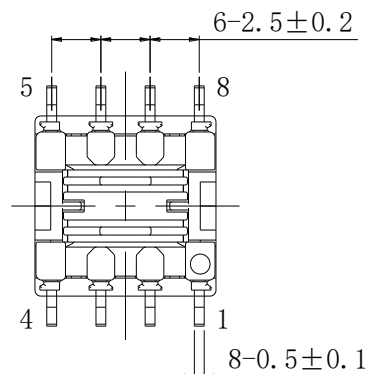
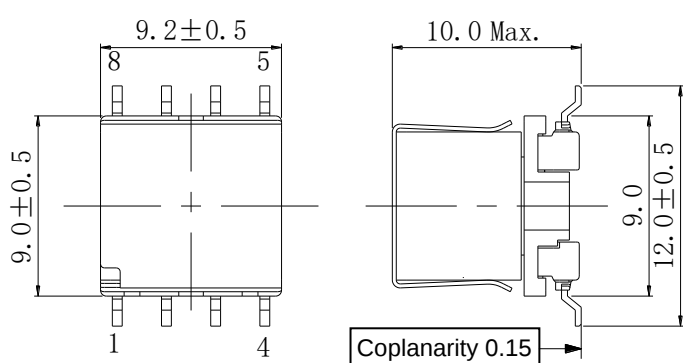


Application

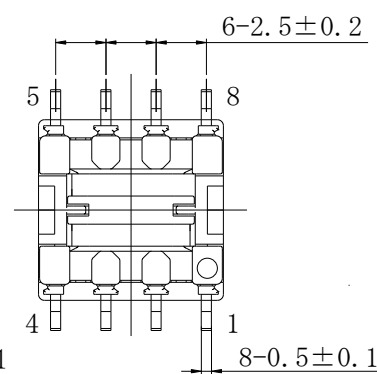
- Battery management system for new energy vehicles (EV, PHEV, HEV etc.)
- Battery management for industrial storage batteries

Dimensions

- Size (L x W x H): 12.5mm x 9.7mm x 10.0mm (Max)
- Number of terminals: 4/4 (Primary/Secondary)

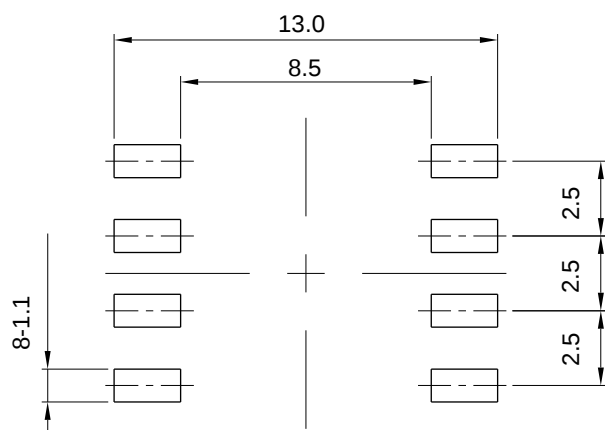


(CEP99 bottom view)

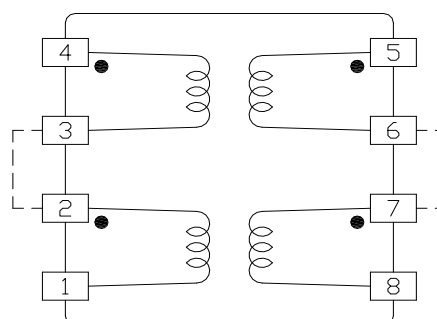


(CEP99B bottom view)

Recommended Land Pattern (mm)



Terminal connections (Bottom view)



“●” is electric polarity.

※ (2-3) and (6-7) shorted when used.

Turn ratio (1-4: 5-8) : 1: 1

Note : This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

BMS Pulse Transformer

CEP99 / CEP99B



Specifications

Type name	Part No.	Inductance (1-4)	Distributed Capacitance (1-4)	Interwinding Capacitance (1-4:5-8)	Leakage Inductance (1-4)	D.C.R (1-4)	Permitted current (1-4)
CEP99	CEP99-102 (S-0074-6986)	Min.618 μ H	Max.5.2 pF	Max.2.5 pF	Max.28.6 μ H	Max.1.34 Ω	DC 310mA
	CEP99NP-LTC6804 (S-1867-0096)	Min.45 μ H	Max.6.6 pF	Max.1.8 pF	Max.2.3 μ H	Max.0.39 Ω	DC 560mA
	CEP99P (S-1557-0225)	Min.45 μ H	Max.6.6 pF	Max.1.8 pF	Max.2.3 μ H	Max.0.39 Ω	DC 560mA
	CEP99P2 (S-1557-0236)	Min.75 μ H	Max.4.9 pF	Max.2.0 pF	Max.3.3 μ H	Max.0.53 Ω	※
CEP99B	CEP99B-272 (S-0074-7006)	Min.1.62 mH	Max.11.5 pF	Max.2.5 pF	Max.67.6 μ H	Max.2.06 Ω	DC 240mA

- Withstand voltage (1-4:5-8): DC 3,500V /60sec or AC2,500V /60 sec (0.5mA, 50Hz/60Hz)
- Permitted current: when current loaded, ΔT temp. rise is below 30 $^{\circ}$ C
- The working voltage should not be over DC 600V
- * We will take measurements according to the requests.

IC reference information

- **CEP99P**
Panasonic (AN84924, AN84925)
- **CEP99P2**
Panasonic (AN84913, AN84914, AN84933)
- **CEP99-102**
Analog Devices (LTC6804-1/ LTC6804-2, MAX17841, MAX17841B, MAX14920, MAX14921), Texas instruments (BQ79616-Q1, BQ79614-Q1, BQ79612-Q1, BQ79606-Q1, BQ76PL455A-Q1, BQ79606-Q1, BQ79600-Q1)
- **CEP99NP-LTC6804**
Analog Devices (LTC6804, LTC6810, LTC6811, LTC6812, LTC6813, LTC6820, LTC2949)
- **CEP99B-272**
Analog Devices (MAX14920, MAX14921), Texas instruments (BQ76PL455A-Q1, BQ79606-Q1, BQ79606-Q1, BQ76PL455A-Q1)
- BQ79606A-Q1 Evaluation Module (Texas instruments/ Demo board)

* IC reference information have possibilities to be updated without notice.