

# BMS Pulse Transformer CEP99/CEP99B



## ◆ Outline

- Pulse transformer for Automobiles.

## ◆ Application

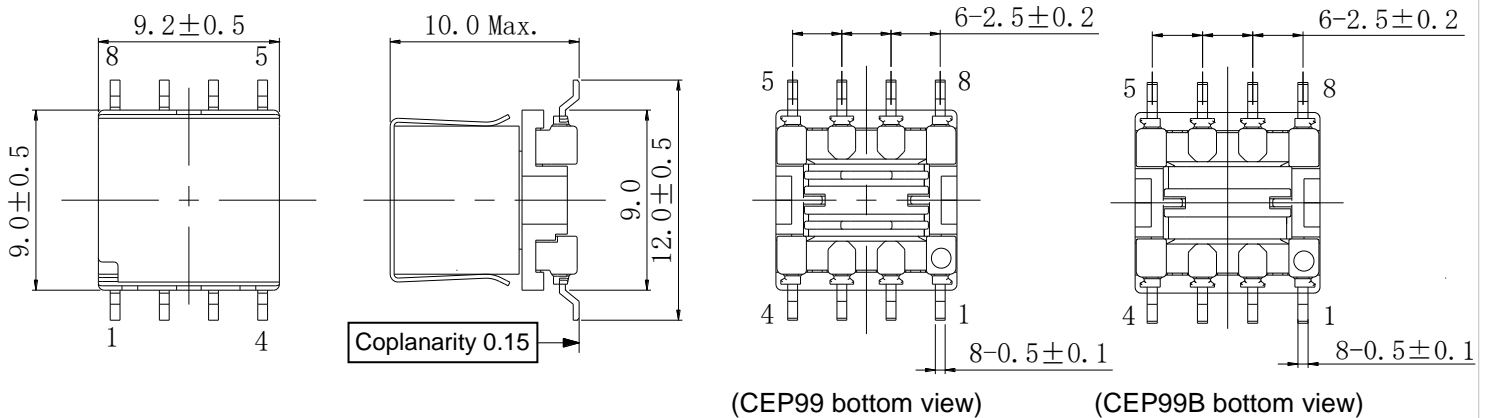
- Battery management system of automobiles

## ◆ Features

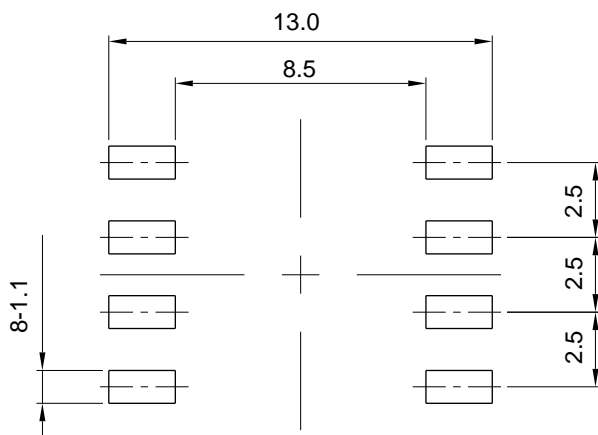
- 8 pins SMD type transformers within 0.15mm coplanarity
- Isolation voltage (Pri – Sec) AC 2500Vrms @ 60sec
- Working voltage up to DC600V
- Qualified AEC-Q200
- Operating Temperature: - 40deg. ~ +125deg. (including self-heating)
- Packing Quantity 300pcs per reel



## ◆ Dimensions [mm]

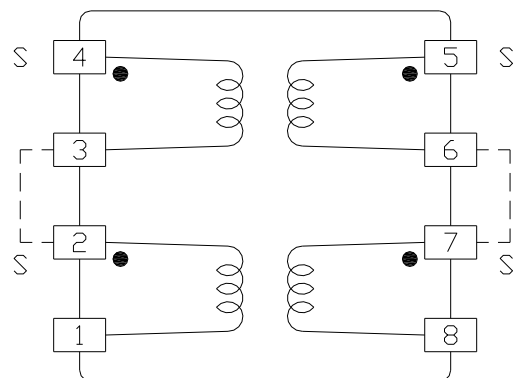


## ◆ Reference Land pattern [mm]



## ◆ Terminal connections (bottom view)

Winding ratio: 1:1:1:1



“S” is winding start.

“●” is electric polarity.

※ (2-3) and (6-7) shorted when used.

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

| Item                     | Specification                          |  |   |  |  | Testing condition  |
|--------------------------|--|--|---|--|--|--|
|                          | CEP99                                  |  |   |  | CEP99B   |  |
| Part name                | CEP99P                                 | CEP99P2                                | CEP99-102   | CEP99NP-LTC6804  | CEP99B-272   |  |
| Sumida Spec#             | S-1557-0225                            | S-1557-0236                            | S-0074-6986   | S-1867-0096  | S-0074-7006  |  |
| Inductance               | (1-4)<br>Min.45 $\mu$ H                | Min.75 $\mu$ H                         | Min.618 $\mu$ H   | Min.45 $\mu$ H   | Min.1.62 mH  | 10kHz, 20mV  |
| Stray Capacitance        | (1-4)<br>Max.6.6 pF                    | Max.3.2 pF                             | Max.5.2 pF  | Max.6.6 pF   | Max.11.5 pF  | CEP99P : 30MHz, 20mV<br>CEP99P2 : 20MHz, 20mV<br>CEP99-102 : 10MHz, 20mV<br>CEP99NP-LTC6804 : 30MHz, 20mV<br>CEP99B-272 : 5MHz, 20mV   |
| Interwinding Capacitance | (1-4:5-8)<br>Max.1.8 pF                | Max.2.0 pF                             | Max.2.5 pF  | Max.1.8 pF   | Max.2.5 pF   | CEP99P : 100kHz, 20mV<br>CEP99P2 : 100kHz, 20mV<br>CEP99-102 : 10kHz, 20mV<br>CEP99NP-LTC6804 : 100kHz, 20mV<br>CEP99B-272 : 100kHz, 20mV  |
| Leakage Inductance       | (1-4)<br>Max.2.3 $\mu$ H               | Max.3.3 $\mu$ H                        | Max.28.6 $\mu$ H  | Max.2.3 $\mu$ H  | Max.67.6 $\mu$ H   | CEP99P : 100kHz, 20mV,(5-8)short<br>CEP99P2 : 100kHz, 20mV,(5-8)short<br>CEP99-102 : 10kHz, 20mV,(5-8)short<br>CEP99NP-LTC6804 : 100kHz, 20mV,(5-8)short<br>CEP99B-272 : 100kHz, 20mV,(5-8)short |
| D.C.R.                   | (1-4)<br>Max.0.39 $\Omega$             | Max.0.53 $\Omega$                      | Max.1.34 $\Omega$   | Max.0.39 $\Omega$  | Max.2.06 $\Omega$  | at 20 deg.   |
| Withstand Voltage        | (1-4:5-8)                              | AC2,500V, 60sec                        |   |  |  | 0.5mA, 50Hz/60Hz   |
| Turn Ratio               | (1-4:5-8)                              | 1 : 1                                  |   |  |  | —  |
| Recommended By           | <b>Panasonic</b><br>AN84924<br>AN84925 | <b>Panasonic</b><br>AN84913<br>AN84914 | <b>Maxim</b><br>MAX17841<br>MAX14920<br>MAX14921<br><b>TI</b><br>BQ76PL455A-Q1<br>BQ79606A-Q1<br>BQ79600-Q1<br>BQ79612-Q1<br>BQ79614-Q1<br>BQ79616-Q1<br><br>Sumida<br>standard<br>specifications | <b>ADI</b><br>LTC6804<br>LTC6810<br>LTC6811<br>LTC6812<br>LTC6813<br>LTC2949 | <b>Maxim</b><br>MAX14920<br>MAX14921<br><b>TI</b><br>BQ76PL455A-Q1<br>BQ79606-Q1<br><br>Sumida<br>standard<br>specifications | —  |

## Demo board information / Reference

### <TEXAS INSTRUMENTS>

\*BQ79606A-Q1 Evaluation Module

### <ADI>

\*LTC6820 isoSPI 2-Wire Serial Interface / LTC6820IMS Demo circuit 1941D  
/ Sumida preliminary part number: 13353-T002



For sales office information, please [click here](#) to visit our website.

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