

Eaton Current sense transformers (ECST)



Eaton's current sense transformers for current level accuracy in power circuits



Eaton's current sense transformers (ECST) provide accurate sensing and measurement of current levels in power circuits and have a low DC resistance coil that can sense current levels and current direction changes with minimal energy dissipation.

Product description

Eaton's current sense transformers (ECST) are suitable for high-reliability commercial applications. The ECST provides accurate sensing and measurement of current levels in power circuits and has a low DC resistance coil that can sense current levels and current direction changes with minimal energy dissipation.

Eaton's current sense transformers help prevent overcurrent conditions and other current fault conditions in powered circuits. They feature a rugged bobbin construction ideal for use in harsh operating conditions.

Key applications

- Improving efficiency on high-frequency switched-mode power supplies (SMPS)
- AC current detection
- Load drop/shutdown detection
- System tampering detection
- Load measuring
- High-frequency current sensing

Features and benefits

- Multiple size options
- Wide selection of turns ratio
- High current capability up to 15 A
- Low DCR current sense winding
- High frequency range up to 1 MHz
- Operating temperature range from -40 °C to +125 °C
- 500 V isolation voltage

EATON

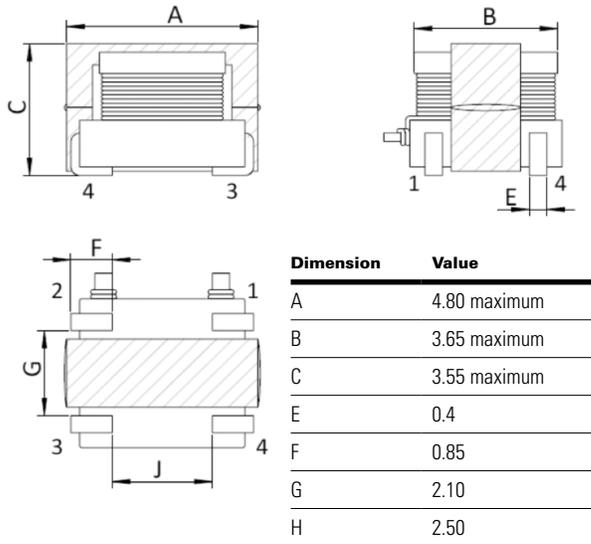
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Product specifications

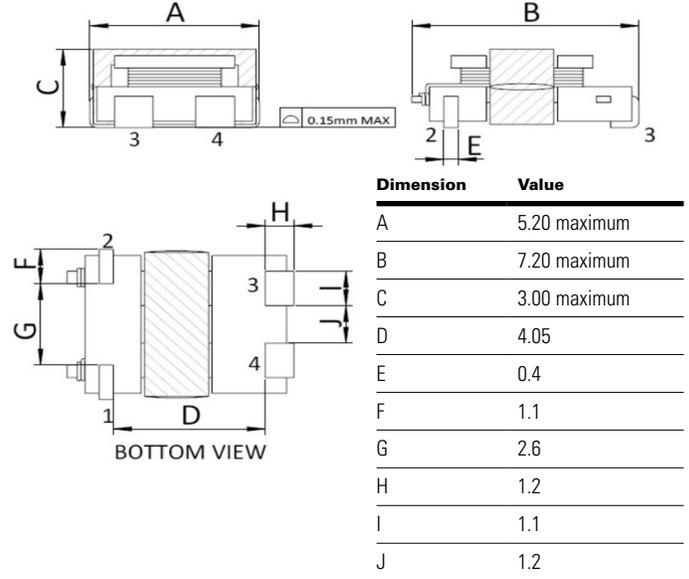
Family	Turns ratio range sec:pri	Secondary inductance range (μH)	DCR sec range (Ω) maximum	DCR pri ($\text{m}\Omega$) reference	Hi-pot pri to sec @ 2 mA 3 seconds 50 Hz	Sensed current (A) maximum
ECST1V0504	20:1 to 150:1	33 to 1800	0.35 to 21	3	500 Vac	7
ECST1V0703	20:1 to 150:1	53 to 2990	0.42 to 22.3	1.5	500 Vac	9
ECST1V0805	20:1 to 125:1	80 to 3000	0.4 to 11.5	0.7	500 Vac	10
ECST1V1308	20:1 to 200:1	220 to 22000	0.21 to 8	3.9	500 Vac	15

Dimensions (mm)

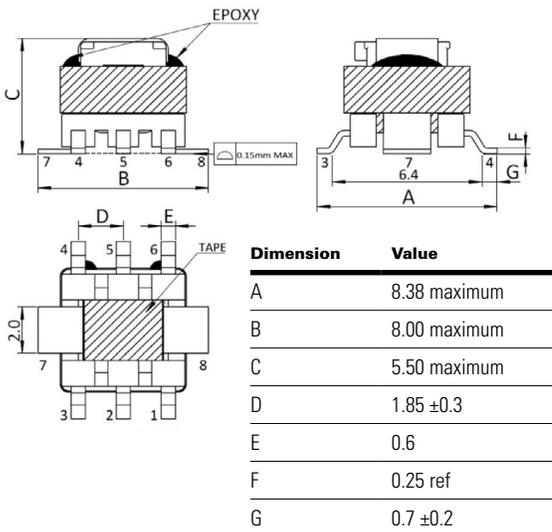
ECST1V0504



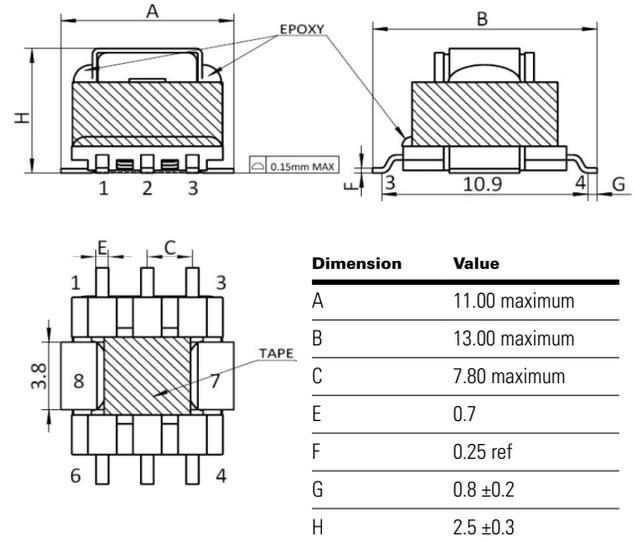
ECST1V0703



ECST1V0805



ECST1V1308



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