

Compact High Current Power Inductor CSPT1590 Series

- Low loss, low temperature rise, robust package design
- Improve DC-DC power conversion efficiency and system stability



■ General Description

CODACA Electronic launched compact high current power inductor CSPT1590 series, which are designed for high power DC-DC converters, point-of-load (POL) power supplies, voltage regulation module (VRM) and other applications.

The CSPT1590 series is designed with wide-temperature and low-power consumption core material, which make it to have lower loss in high frequency and high temperature condition. The flat wire winding design, effectively reduces the DC resistance of the inductor. Both the core and coil design in compact size ensure the higher conversion efficiency for the DC-DC converter. In the mean time, CSPT1590 series has good saturation current performance to withstand higher ripple current. CSPT1590 series adopts a 3-terminal structure, enhances anti-vibration performance and reducing packaging height. The inductor adopts a magnetic shielding structure and has excellent anti-electromagnetic interference capabilities.

■ Features



Wide temperature and low power consumption material, low core loss



Flat wire winding, low resistance, low temperature rise



Robust package design, additional terminals for better solder ability



Operating temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

■ Applications



DC-DC Converter



POL Power Supply

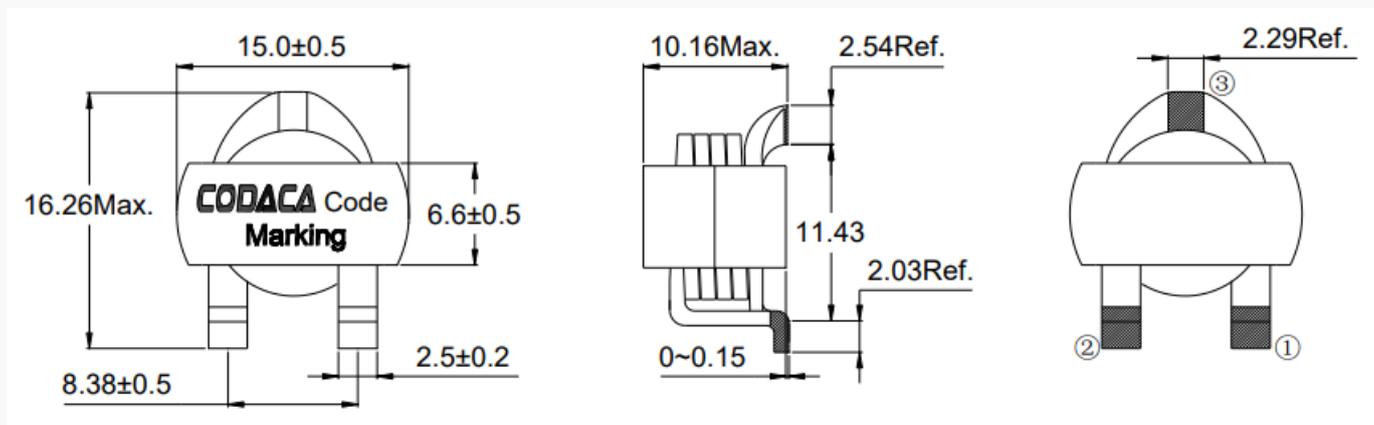


Voltage Regulation Module (VRM)



Voltage Reduction Device (VRD)

■ Dimensions (mm)



■ Electrical Characteristics

Part No.	Inductance (μH)	D.C.R. (mΩ)	Saturation current (A)	Temperature rise current (A)	Size LxWxH(mm)
CSPT1590-R30M	0.30	0.72	50.00	44.00	15.00x16.26x10.16
CSPT1590-R50M	0.50	0.96	39.00	42.00	15.00x16.26x10.16
CSPT1590-R60M	0.60	0.96	35.00	42.00	15.00x16.26x10.16
CSPT1590-R68M	0.68	0.96	32.00	42.00	15.00x16.26x10.16
CSPT1590-R80M	0.80	0.96	25.00	42.00	15.00x16.26x10.16
CSPT1590-R90M	0.90	1.18	28.00	26.00	15.00x16.26x10.16
CSPT1590-1R0M	1.00	0.96	20.00	42.00	15.00x16.26x10.16
CSPT1590-1R2M	1.20	1.18	22.00	26.00	15.00x16.26x10.16
CSPT1590-1R5M	1.50	1.18	17.00	26.00	15.00x16.26x10.16



Learn more

