

## Vehicle-Grade High Current Power Inductor VSBX Series

- Low loss, high efficiency, Lightweight design
- Compliant with AEC-Q200 (-55°C ~ +155°C)



### ■ General Description

In response to automotive electronics' demand for power inductors with high saturation current and low DCR, CODACA launched the vehicle-grade magnetically shielded high-current power inductor VSBX series. VSBX series adopts the high Bs core material and flat wire winding design, which provides excellent DC bias capability, outstanding anti-saturation capability, very low DC resistance, compact structure, suitable for various program designs requiring high-density installation.

VSBX has developed 14 series with product dimensions ranging from 0630 to 2212mm, offering flexible selection options to meet diverse customer application requirements. The VSBX series features inductance values from 0.13 to 100 $\mu$ H, DCR from 0.68 to 28.8m $\Omega$ , saturation current from 7.40 to 75.0A, and temperature rise current from 4.40 to 40.0A.

### ■ Features



High Bs core material and flat wire winding design, low DCR, low loss



Excellent DC bias capability and anti-saturation capability



Compact structure, suitable for high-density installation



Operating temperature:  
-55°C ~ +155 °C

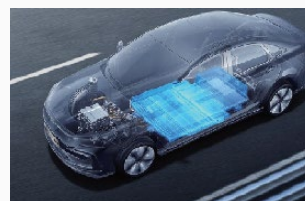
### ■ Applications



DC-DC Converter



LED Driver

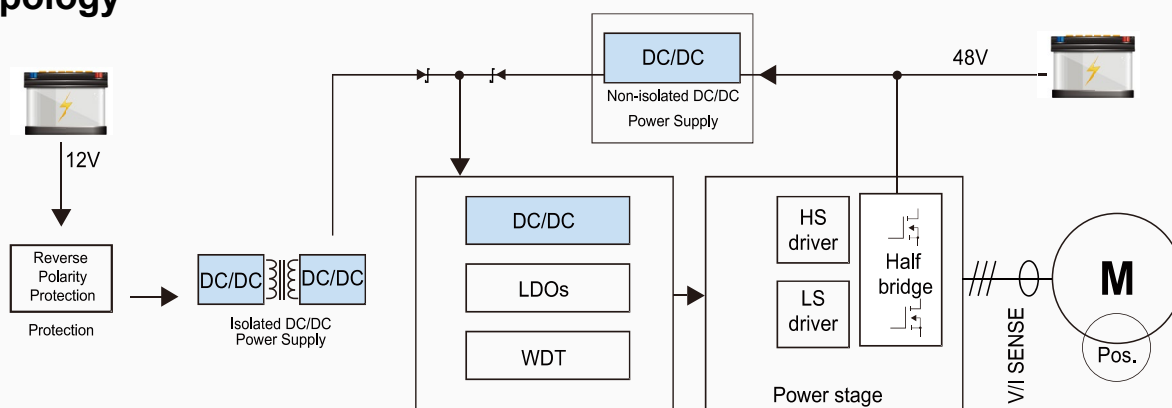


BMS



Motor Control

## ■ Topology



## ■ Electrical Characteristics

Part No.	Inductance (μH)	D.C.R. (mΩ)	Saturation current (A)	Temperature rise current (A)	Size LxWxH(mm)
<a href="#">VSBX0630</a>	0.13~2.10	0.78~10.8	12.0~50.0	7.80~23.0	7.00x6.90x3.00
<a href="#">VSBX0640</a>	0.22~5.50	1.00~20.1	9.50~45.0	5.50~21.0	7.00x6.90x3.80
<a href="#">VSBX0650</a>	0.28~10.0	0.88~26.5	7.40~40.0	4.40~21.0	7.00x6.90x4.70
<a href="#">VSBX1030</a>	0.22~2.50	0.82~8.50	16.0~55.0	10.0~22.0	11.2x10.2x3.00
<a href="#">VSBX1040</a>	0.50~8.20	1.11~17.9	11.0~43.0	6.50~22.0	11.2x10.2x4.00
<a href="#">VSBX1050</a>	0.72~10.0	1.23~20.2	11.0~40.0	6.20~23.0	11.2x10.3x4.70
<a href="#">VSBX1060</a>	0.80~15.0	1.30~20.9	10.5~45.0	5.60~25.0	11.2x10.2x5.80
<a href="#">VSBX1250</a>	1.20~10.0	1.43~13.5	16.0~45.0	8.80~25.0	13.8x12.8x5.00
<a href="#">VSBX1265</a>	1.30~28.0	1.10~22.5	8.50~40.0	6.90~30.0	14.0x12.8x6.20
<a href="#">VSBX1275</a>	1.20~32.0	0.84~23.7	10.5~55.0	7.00~32.0	13.8x12.8x6.30
<a href="#">VSBX1670</a>	0.65~17.0	0.68~12.3	16.0~75.0	11.0~40.0	16.8x16.0x7.00
<a href="#">VSBX1690</a>	1.70~35.0	1.12~18.8	12.0~55.0	8.70~37.0	16.8x16.0x8.80
<a href="#">VSBX1809</a>	1.60~16.0	1.00~7.80	19.0~62.0	14.0~36.0	19.3x18.2x8.90
<a href="#">VSBX2212</a>	2.40~100.0	0.84~28.8	11.5~70.0	7.50~40.0	22.5x22.0x12.0

## ■ Quality Management System

- IATF16949
- CNAS laboratory
- ISO9001
- ISO14001
- ISO45001

