Chokes for Data and Signal Lines

CAN Bus Choke, EIA 1812

Rated voltage 42 Vac/80 Vdc Rated current 100 mA Rated inductance 11 to 51 μH

Construction

- Current-compensated ring core double choke with ferrite core
- Bifilar winding (B82799-C...)
- Sector winding (B82799-S...)

Features

- High performance
- Case flame-retardant as per UL 94 V-0
- Suitable for reflow soldering and conductive adhesion
- Operation up to 150°C

Applications

■ B82799-C:

Suppression of asymmetrical interference coupled in on lines, whereas data signals up to some MHz can pass unaffectedly

■ B82799-S:

Suppression of asymmetrical and symmetrical interference coupled in on lines. The high-frequency portions of the symmetrical data signal are decreased so far that EMC problems can be significantly reduced

Marking

Manufacturer, inductance value (coded), date of manufacture, coded (year, day of week, calender week)

Delivery mode

Blister tape, reel packing For details on taping, packing and packing units see page 302





SMD

B82799



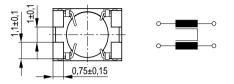
Chokes for Data and Signal Lines

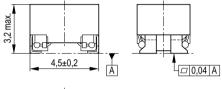
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CAN Bus Choke, EIA 1812

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Dimensional drawing

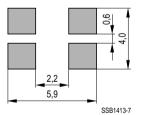






SSB1412-Y

Layout recommendation



244 04/00



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SMD

General technical data

Rated voltage V _R	42 Vac (50/60 Hz) 80 Vdc		
Rated current I _R	Referred to 50 Hz and 60 °C ambient temperature		
Rated inductance L _R	Measured with HP 4275A at 100 kHz and 0,1 mA (specified per winding)		
Inductance tolerance	± 30 %		
Inductance decrease $\Delta L/L_0$	< 10 % at dc magnetic bias with $I_{\rm R}$		
Stray inductance <i>L</i> _S	Measured with HP 4275A. Measuring frequency at $L_{\rm R} \le$ 11 µH = 1 MHz, 5 mA $L_{\rm R} >$ 11 µH = 100 kHz, 5 mA		
DC resistance R _{typ}	Typical values, measured at 20 °C ambient temperature		
Solderability	(215 3) °C, (3 0,3) s wetting of soldering area ≥ 95 % in accordance with IEC 60068-2-58		
Climatic category	40/125/56 (- 40 °C/+ 125 °C/56 days damp heat test) in accordance with EN 60068-1		
Weight	Approx. 0,08 g		

Characteristics and ordering codes

L _R ¹⁾ μΗ	L _{S, typ} nH	I _R mA	R _{typ} mΩ	V _T Vdc, 2 s	Ordering code
11	45	100	150	250	B82799-C113-N1
22	1300	100	200	250	B82799-S223-N1
33	1800	100	250	250	B82799-S333-N1
51	2700	100	300	250	B82799-S513-N1

1) Types up to 2200 μ H upon request.



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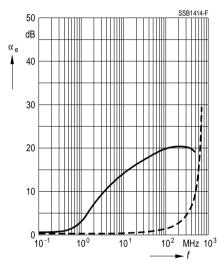
SMD

Insertion loss α_e (typical values at $Z = 50 \Omega$)

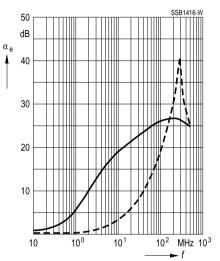
------ asymmetrical, all branches in parallel (common mode)

- - - - - - symmetrical (differential mode)

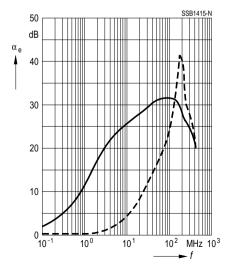
B82799-C113-N1



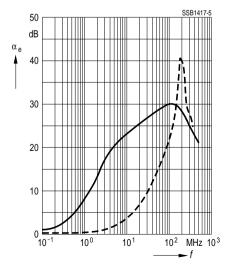
B82799-S223-N1



B82799-S513-N1



B82799-S333-N1



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