

**SMD**

**Rated voltage 42 Vac/80 Vdc**  
**Rated current 200 to 1000 mA**  
**Rated inductance 5  $\mu$ H to 4,7 mH**

**Construction**

- Current-compensated ring core choke with ferrite core
- Bifilar winding (B82790-C...)
- Sector winding (B82790-S...)

**Features**

- Case flame-retardant as per UL 94 V-0
- Suitable for reflow soldering

*Special types for conductive adhesion  
and ambient temperatures up to 150 °C on request*

**Applications**

- B82790-C:  
Suppression of asymmetrical interference coupled in on lines, whereas data signals up to some MHz can pass unaffectedly
- B82790-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

**Terminals**

- Tinned

**Marking**

Manufacturer, ordering code (short form),  
date of manufacture, coded (year, day of week, calendar week)

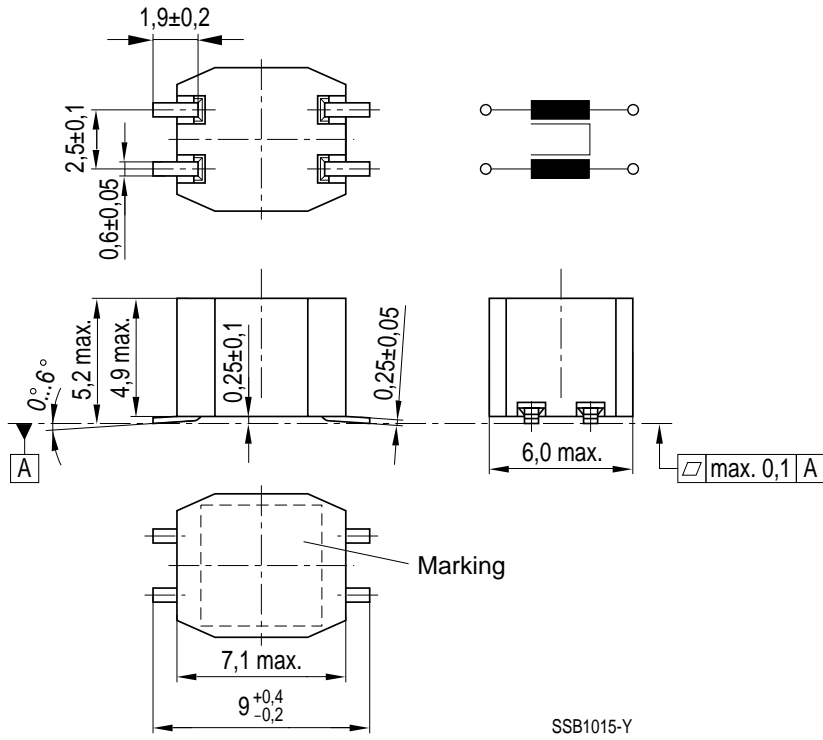
**Delivery mode**

Blister tape, reel packing

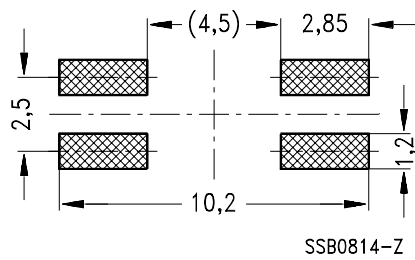
For details on taping, packing and packing units [see page 302](#)



Dimensional drawing



Layout recommendation




**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 $L \leq 1$ mH = 100 kHz, 0,1 mA $L > 1$ mH = 10 kHz, 0,1 mA (specified per winding)
Inductance tolerance	B82790-+****-N201/N215: $\pm 30$ % B82790-+****-N240/N265: $-30/+50$ %
Inductance decrease $\Delta L/L_0$	$< 10$ % at dc magnetic bias with $I_R$
Stray inductance $L_S$	Measured with HP 4275A. Measuring frequency at $L \leq 11$ $\mu$ H = 1 MHz, 5 mA $L > 11$ $\mu$ H = 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 $\geq 95$ % in accordance with IEC 60068-2-58
Climatic category	40/125/56 ( $-40$ °C/+ 125 °C/56 days damp heat test) in accordance with IEC 60068-1
Weight	Approx. 0,3 g

**Characteristics and ordering codes**

$L_R$ mH	$L_S, typ$ nH	$I_R$ mA	$R_{typ}$ m $\Omega$	$V_T$ Vdc, 2 s	Ordering code <sup>1)</sup>
0,005	50	1000	100	250	B82790-C0502-N201
0,011	50	500	120	250	B82790-C0113-N201
0,025	1500	500	130	250	B82790-S0253-N201
0,051	2000	500	160	250	B82790-S0513-N201
0,470	200	500	200	750	B82790-C0474-N215
1,0	250	500	200	750	B82790-C0105-N240
2,2	250	400	400	750	B82790-C0225-N265
4,7	300	200	550	750	B82790-C0475-N265

1) Special types for conductive adhesion and ambient temperatures of up to 150 °C upon request.

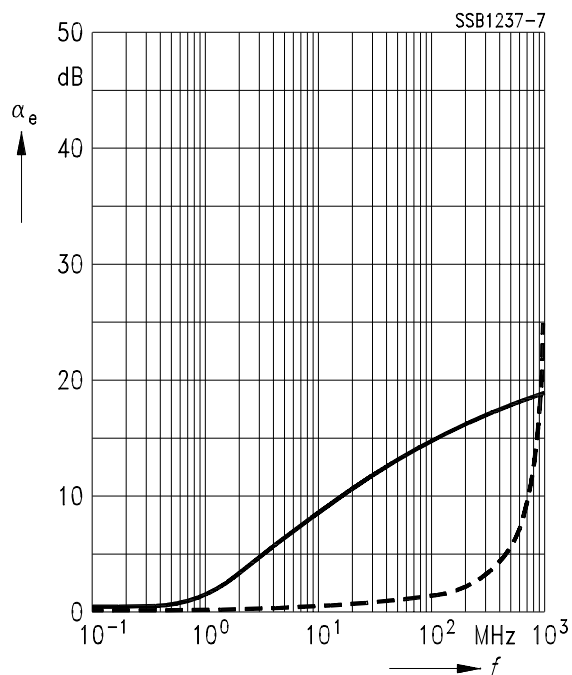


Insertion loss  $\alpha_e$  (typical values at  $Z = 50 \Omega$ )

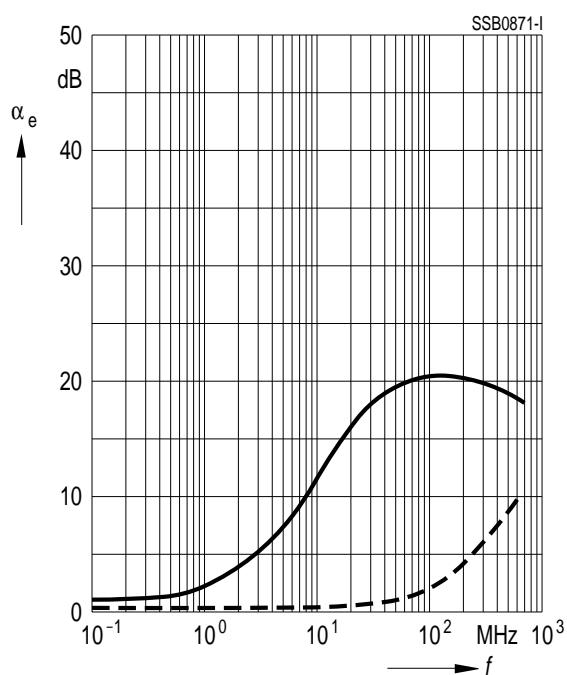
———— asymmetrical, all branches in parallel (common mode)

- - - - - symmetrical (differential mode)

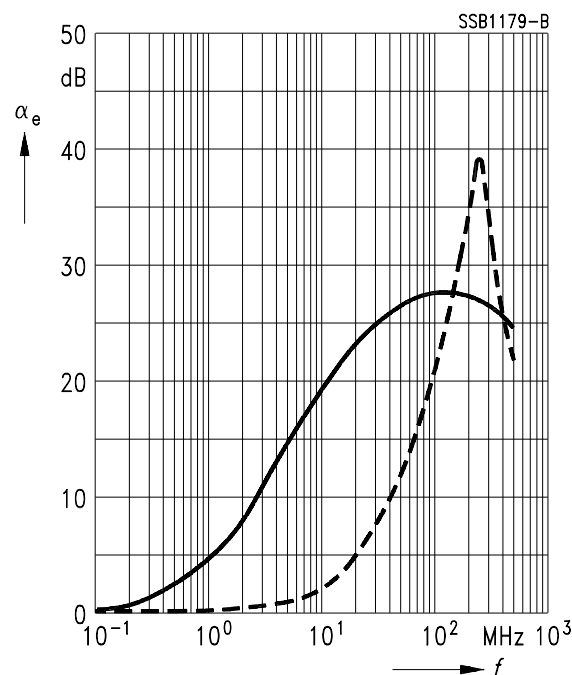
B82790-C0502-N201



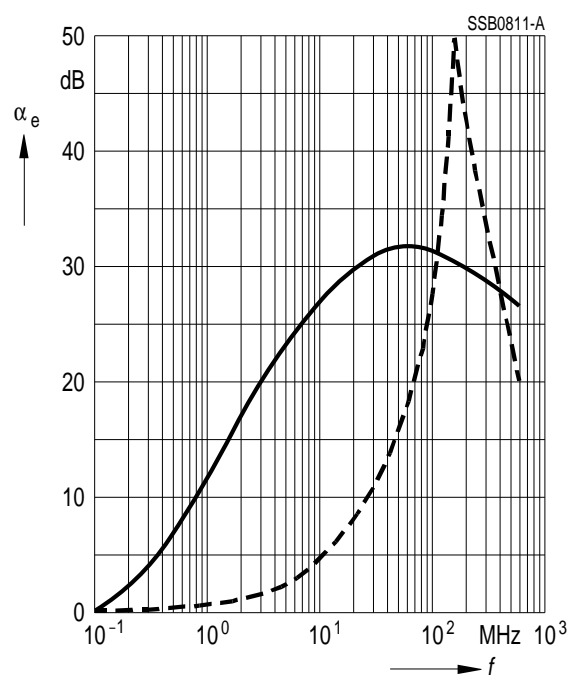
B82790-C0113-N201



B82790-S0253-N201



B82790-S0513-N201



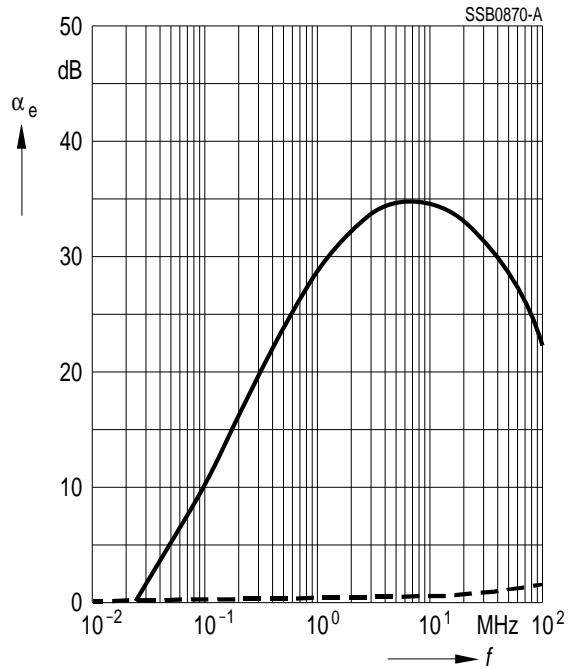


Insertion loss  $\alpha_e$  (typical values at  $Z = 50 \Omega$ )

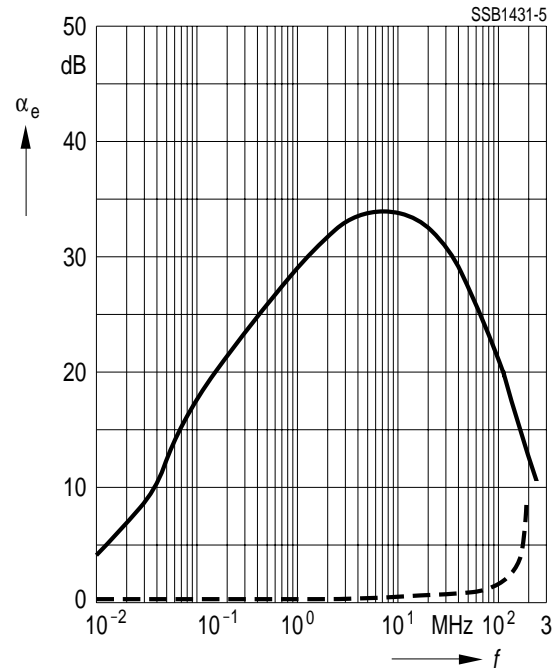
———— asymmetrical, all branches in parallel (common mode)

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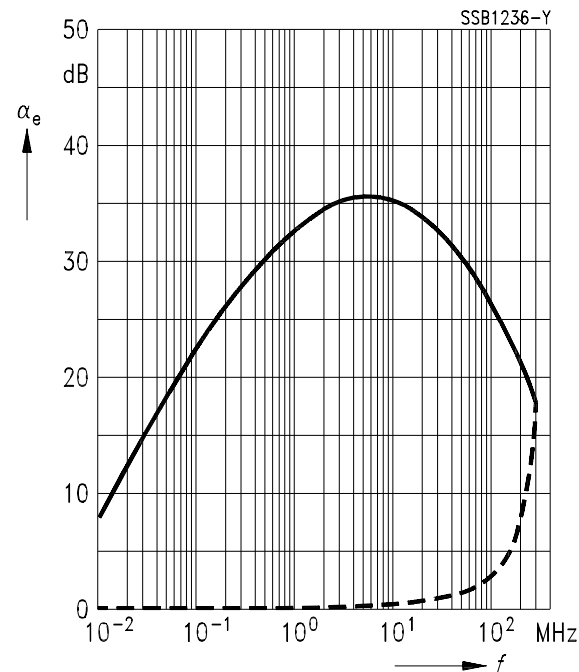
B82790-C0474-N215



B82790-C0105-N240



B82790-C0225-N265



B82790-C0475-N265

