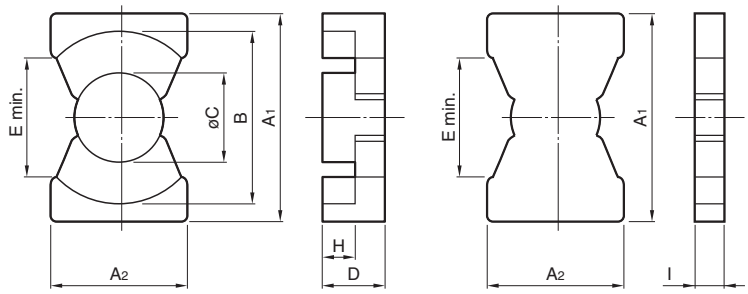
Mn-Zn PQI Cores

SHAPES AND DIMENSIONS



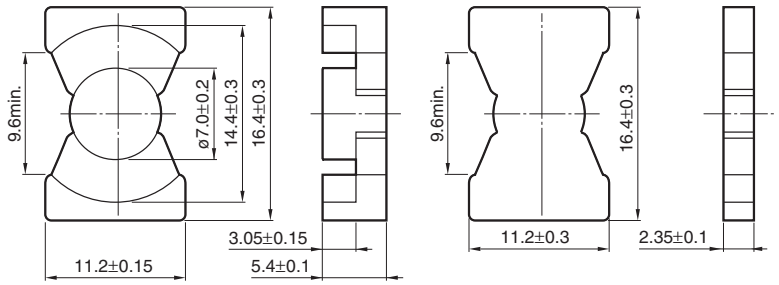
PC95	PQI16/7.8Z	-	12
Material	Size of E core		AL-value (Z: without air gap)

Part No.(HPQ+PQD)	Dimensions (mm)							
	A1	A2	B	øC	D	E min.	H	I
PC95PQI16/7.8Z-12	16.40±0.30	11.20±0.30	14.40±0.30	7.00±0.20	5.40±0.10	9.60	3.05±0.15	2.35±0.10
PC90PQI16/7.8Z-12								
PC95PQI20/9Z-12	20.50±0.40	14.00±0.40	18.00±0.40	8.80±0.20	6.00±0.10	12.00	3.05±0.15	2.95±0.10
PC90PQI20/9Z-12								
PC95PQI26/12Z-12	26.50±0.45	19.00±0.45	22.50±0.45	12.00±0.20	7.30±0.10	15.50	3.10±0.15	4.20±0.10
PC90PQI26/12Z-12								

Part No.(ELH+ELH)	Effective parameter							Electrical characteristics	
	Core factor C1(mm−1)	Effective cross-sectional area Ae(mm2)	Effective magnetic path length ℓe(mm)	Effective core volume Ve(mm3)	Amin. (mm2)	Acw (mm2)	Weigh (g)	AL-value (nH/N2) 1kHz 0.5mA 100Ts	
								Without air gap	With air gap
PC95PQI16/7.8Z-12	0.467	19.5	41.8	815	37.6	11.3	5.0	4910±25%	63±3% 100±5% 160±7%
PC90PQI16/7.8Z-12								3600±25%	
PC95PQI20/9Z-12	0.346	22.9	66.0	1510	59.3	14.0	9.0	7070±25%	100±3% 160±5% 250±7%
PC90PQI20/9Z-12								5200±25%	
PC95PQI26/12Z-12	0.224	27.7	123	3410	109	16.3	21	11950±25%	100±3% 160±3% 250±5%
PC90PQI26/12Z-12								8600±25%	

Mn-Zn Planar series **Part No.: PC90PQI16/7.8Z-12**

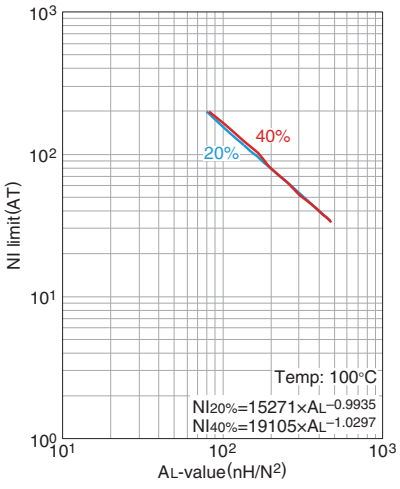
SHAPES AND DIMENSIONS



Dimensions in mm

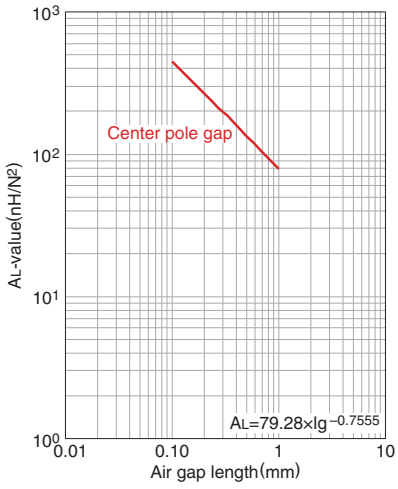
Effective parameter						Electrical characteristics	
Core factor C1 (mm^{-1})	Effective magnetic path length ℓe (mm)	Effective cross-sectional area Ae (mm^2)	Effective core volume Ve (mm^3)	Cross-sectional winding area of core Acw (mm^2)	Weigh (g/set)	AL-value * (nH/N^2) 1kHz 0.5mA	Core loss (W)max. 100kHz 200mT 100°C
0.467	19.5	41.8	815	11.3	5.0	3600±25%	0.5

NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

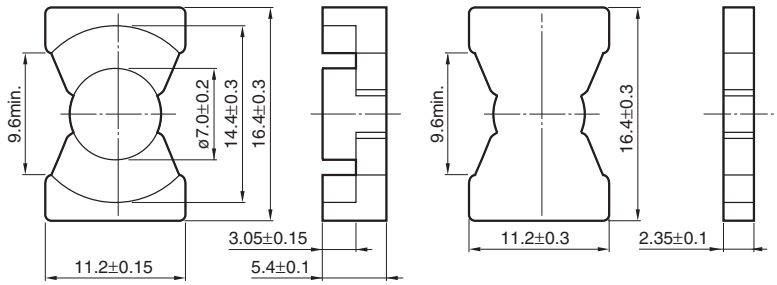
AL-value vs. Air gap length (Typ.)



Measuring conditions
- Coil : ø0.18 2UEW 100Ts
- Frequency : 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C

Mn-Zn Planar series **Part No.: PC95PQI16/7.8Z-12**

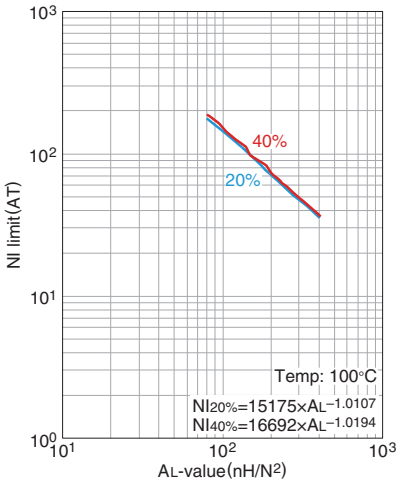
SHAPES AND DIMENSIONS



Dimensions in mm

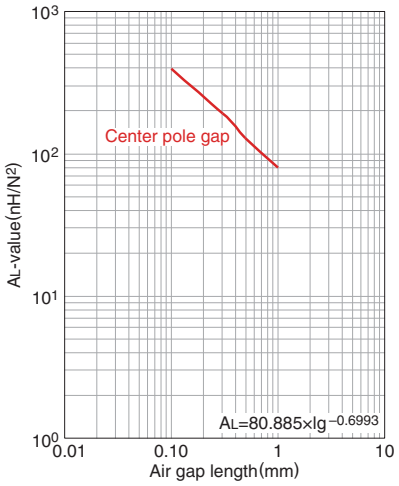
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm^{-1})	(mm)	(mm^2)	(mm^3)	(mm^2)	(g/set)	(nH/N^2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.467	19.5	41.8	815	11.3	5.0	4910±25%	0.45	0.35	0.45

NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

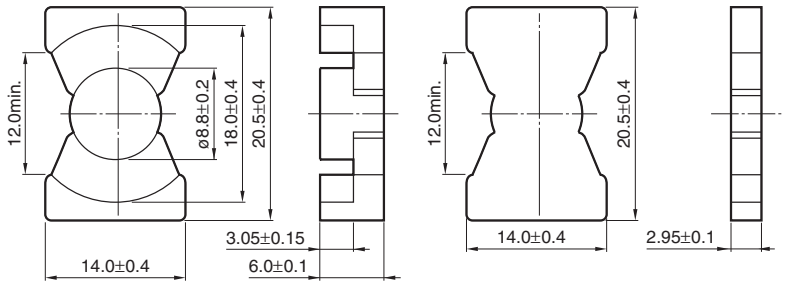
AL-value vs. Air gap length (Typ.)



Measuring conditions
- Coil : ø0.18 2UEW 100Ts
- Frequency : 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C

Mn-Zn Planar series **Part No.: PC90PQI20/9Z-12**

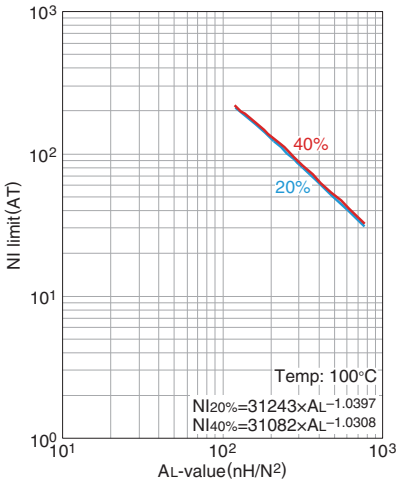
SHAPES AND DIMENSIONS



Dimensions in mm

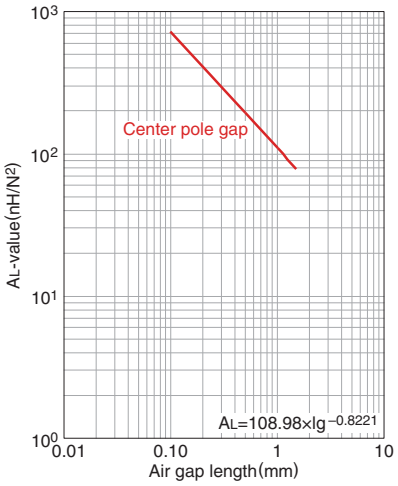
Effective parameter						Electrical characteristics	
Core factor C_1 (mm^{-1})	Effective magnetic path length ℓe (mm)	Effective cross-sectional area Ae (mm^2)	Effective core volume Ve (mm^3)	Cross-sectional winding area of core Acw (mm^2)	Weigh (g/set)	AL-value * (nH/N^2) 1kHz 0.5mA	Core loss (W)max. 100kHz 200mT 100°C
0.346	22.9	66.0	1510	14.0	9.0	5200±25%	0.8

NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

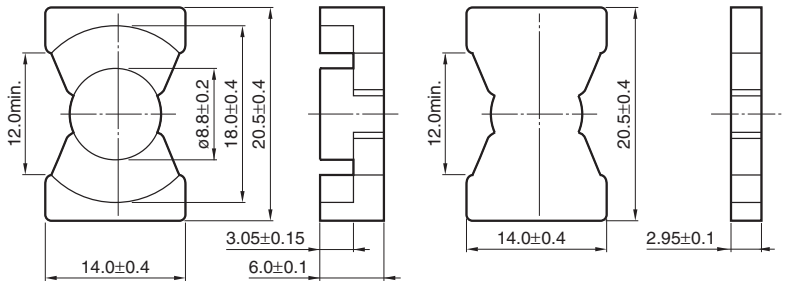
AL-value vs. Air gap length (Typ.)



Measuring conditions
- Coil : ø0.18 2UEW 100Ts
- Frequency : 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C

Mn-Zn Planar series **Part No.: PC95PQI20/9Z-12**

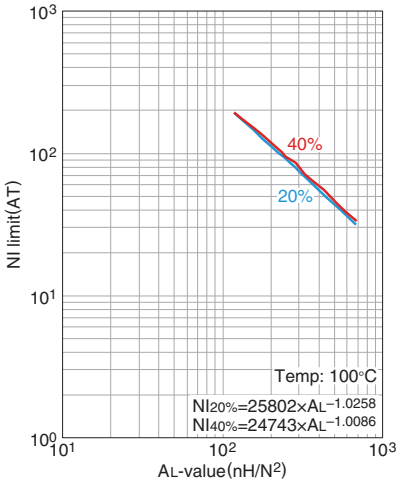
SHAPES AND DIMENSIONS



Dimensions in mm

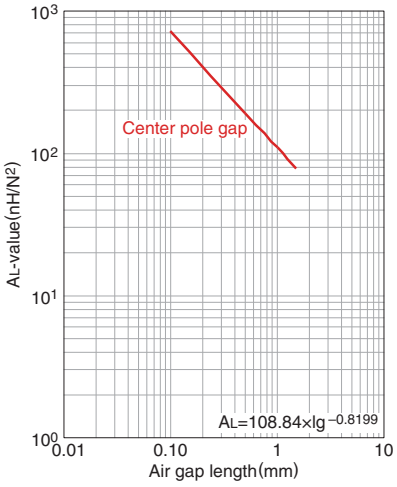
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm^{-1})	(mm)	(mm^2)	(mm^3)	(mm^2)	(g/set)	(nH/N^2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.346	22.9	66.0	1510	14.0	9.0	7070±25%	0.75	0.65	0.75

NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

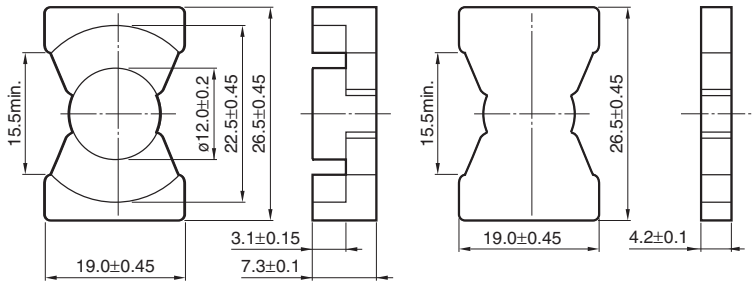
AL-value vs. Air gap length (Typ.)



Measuring conditions
- Coil : ø0.18 2UEW 100Ts
- Frequency : 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C

Mn-Zn Planar series **Part No.: PC90PQI26/12Z-12**

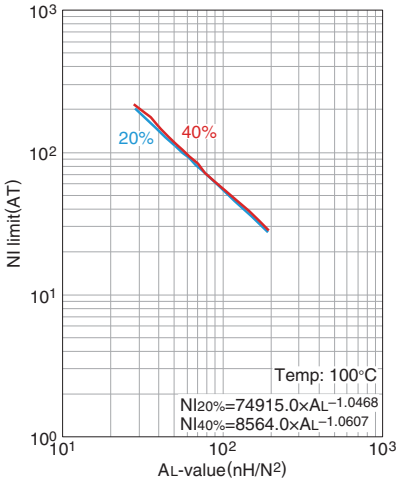
SHAPES AND DIMENSIONS



Dimensions in mm

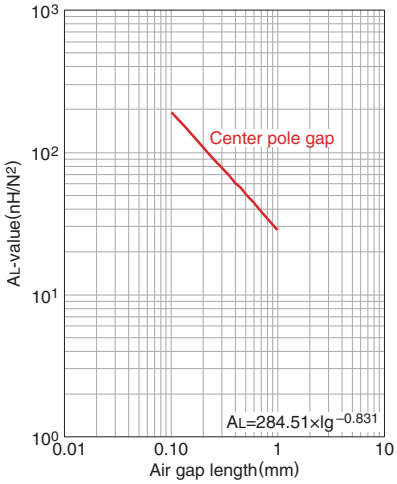
Effective parameter						Electrical characteristics	
Core factor C_1 (mm^{-1})	Effective magnetic path length ℓe (mm)	Effective cross-sectional area Ae (mm^2)	Effective core volume Ve (mm^3)	Cross-sectional winding area of core Acw (mm^2)	Weigh (g/set)	A_L-value * (nH/N^2) 1kHz 0.5mA	Core loss (W)max. 100kHz 200mT 100°C
0.224	27.7	123	3410	16.3	21	8600±25%	1.6

NI limit vs. A_L-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial A_L-value has been made due to the DC superimposition.

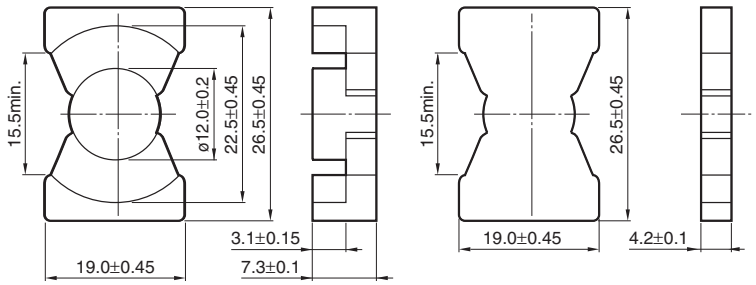
A_L-value vs. Air gap length (Typ.)



Measuring conditions
- Coil : ø0.18 2UEW 100Ts
- Frequency : 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C

Mn-Zn Planar series **Part No.: PC95PQI26/12Z-12**

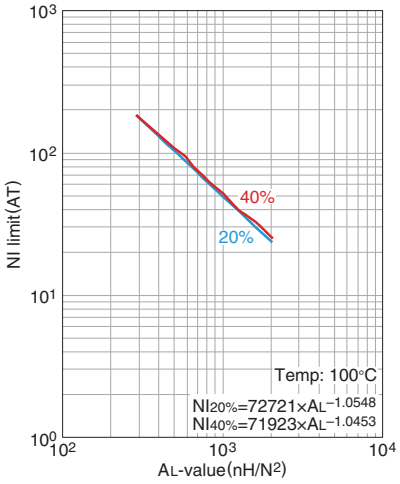
SHAPES AND DIMENSIONS



Dimensions in mm

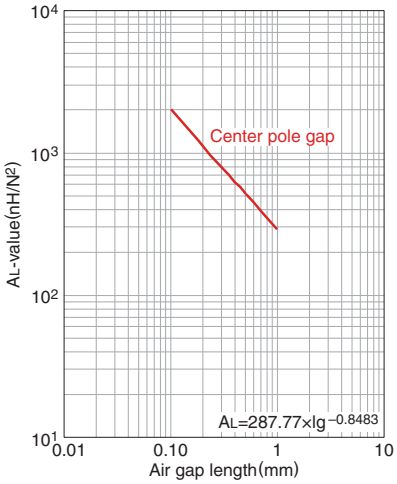
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm^{-1})	(mm)	(mm^2)	(mm^3)	(mm^2)	(g/set)	(nH/N^2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.224	27.7	123	3410	16.3	21	11950±25%	1.5	1.4	1.5

NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

AL-value vs. Air gap length (Typ.)



Measuring conditions
- Coil : ø0.18 2UEW 100Ts
- Frequency : 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C