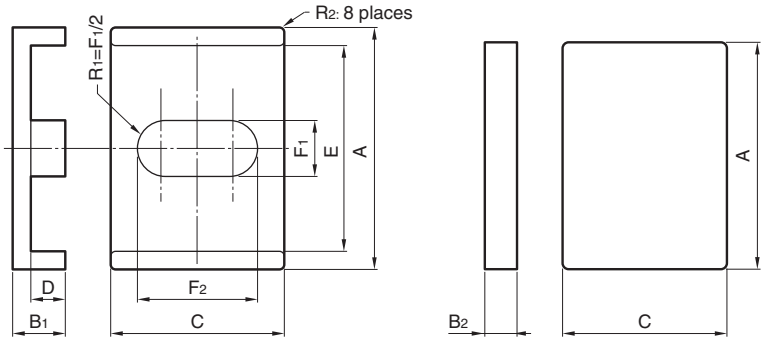
Mn-Zn ELT Cores

SHAPES AND DIMENSIONS



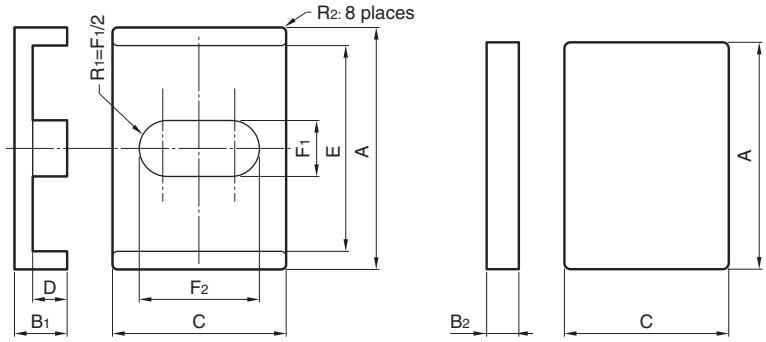
PC95	ELT11X3	-	Z
Material	Size of E core		AL-value (Z: without air gap)

Part No.(ELH+PLT)	Dimensions (mm)								
	A	B1	B2	C	D	E	F1	F2	R2
PC95ELT11X3-Z	11.00±0.20	2.01±0.10	1.01±0.05	8.80±0.20	1.00±0.10	9.17±0.20	2.78±0.10	6.40±0.15	0.30
PC90ELT11X3-Z									
PC95ELT11X4-Z	11.00±0.20	3.01±0.10	1.01±0.05	8.80±0.20	2.00±0.10	9.17±0.20	2.78±0.10	6.40±0.15	0.30
PC90ELT11X4-Z									
PC95ELT13X3.4-Z	13.00±0.25	2.19±0.10	1.19±0.05	10.40±0.20	1.00±0.10	10.83±0.20	3.29±0.10	7.56±0.15	0.30
PC90ELT13X3.4-Z									
PC95ELT13X4.4-Z	13.00±0.25	3.19±0.10	1.19±0.05	10.40±0.20	2.00±0.10	10.83±0.20	3.29±0.10	7.56±0.15	0.30
PC90ELT13X4.4-Z									
PC95ELT15.5X4.3-Z	15.50±0.30	2.92±0.10	1.42±0.10	12.40±0.25	1.50±0.10	12.92±0.25	3.92±0.10	9.01±0.20	0.30
PC90ELT15.5X4.3-Z									
PC95ELT15.5X5.8-Z	15.50±0.30	4.42±0.10	1.42±0.10	12.40±0.25	3.00±0.10	12.92±0.25	3.92±0.10	9.01±0.20	0.30
PC90ELT15.5X5.8-Z									
PC95ELT18X5.3-Z	18.00±0.30	3.65±0.10	1.65±0.10	14.40±0.25	2.00±0.10	15.00±0.30	4.55±0.10	10.47±0.20	0.30
PC90ELT18X5.3-Z									

Part No.(ELH+ELH)	Effective parameter							Electrical characteristics	
	Core factor C1(mm−1)	Effective magnetic path length ℓe(mm)	Effective cross-sectional area Ae(mm2)	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
PC95ELT11X3-Z	0.702	11.7	16.6	194	15.9	3.20	1.1	2590±25%	50±3% 80±5% 125±7%
PC90ELT11X3-Z								1750±25%	
PC95ELT11X4-Z	0.826	13.7	16.5	226	15.9	6.39	1.3	2400±25%	50±3% 80±5% 125±7%
PC90ELT11X4-Z								1700±25%	
PC95ELT13X3.4-Z	0.578	13.4	23.2	312	22.4	3.77	1.8	3390±25%	63±3% 100±5% 160±7%
PC90ELT13X3.4-Z								2400±25%	
PC95ELT13X4.4-Z	0.667	15.4	23.1	357	22.4	7.54	2.0	3160±25%	63±3% 100±5% 160±7%
PC90ELT13X4.4-Z								2300±25%	
PC95ELT15.5X4.3-Z	0.503	16.6	33.1	550	31.9	6.75	3.0	4340±25%	63±3% 100±3% 160±5%
PC90ELT15.5X4.3-Z								2900±25%	
PC95ELT15.5X5.8-Z	0.597	19.6	32.9	646	31.9	13.5	3.5	3680±25%	63±3% 100±3% 160±5%
PC90ELT15.5X5.8-Z								2200±25%	
PC95ELT18X5.3-Z	0.446	19.8	44.5	882	43.0	10.5	5.0	5330±25%	80±3% 125±3% 200±5%
PC90ELT18X5.3-Z								3500±25%	

Mn-Zn ELT Cores

SHAPES AND DIMENSIONS



PC95 ELT18X7.3 - Z

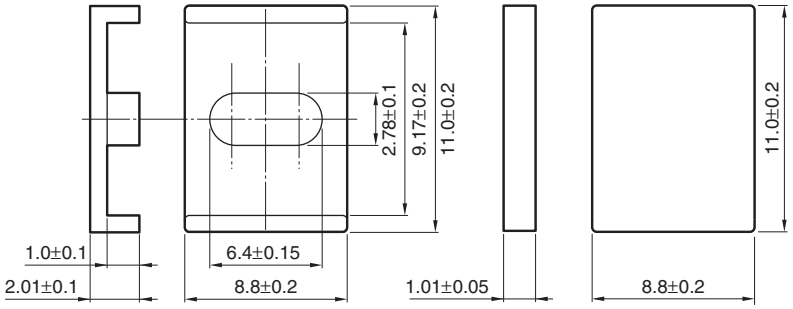
Material	Size of E core	AL-value (Z: without air gap)

Part No.(ELH+PLT)	Dimensions (mm)								
	A	B_1	B_2	C	D	E	F_1	F_2	R_2
PC95ELT18X7.3-Z	18.00±0.30	5.65±0.10	1.65±0.10	14.40±0.25	4.00±0.15	15.00±0.30	4.55±0.10	10.47±0.20	0.30
PC90ELT18X7.3-Z									
PC95ELT20X5.7-Z	20.00±0.35	3.83±0.10	1.83±0.10	16.00±0.30	2.00±0.10	16.67±0.30	5.06±0.15	11.63±0.20	0.50
PC90ELT20X5.7-Z									
PC95ELT20X7.7-Z	20.00±0.35	5.83±0.15	1.83±0.10	16.00±0.30	4.00±0.15	16.67±0.30	5.06±0.15	11.63±0.20	0.50
PC90ELT20X7.7-Z									
PC95ELT22X6-Z	22.00±0.40	4.02±0.10	2.02±0.10	17.60±0.30	2.00±0.10	18.33±0.35	5.56±0.15	12.79±0.25	0.50
PC90ELT22X6-Z									
PC95ELT22X8-Z	22.00±0.40	6.02±0.15	2.02±0.10	17.60±0.30	4.00±0.15	18.33±0.35	5.56±0.15	12.79±0.25	0.50
PC90ELT22X8-Z									
PC95ELT25X6.6-Z	25.00±0.45	4.29±0.10	2.29±0.10	20.00±0.35	2.00±0.10	20.83±0.35	6.32±0.15	14.54±0.25	0.50
PC90ELT25X6.6-Z									
PC95ELT25X8.6-Z	25.00±0.45	6.29±0.15	2.29±0.10	20.00±0.35	4.00±0.15	20.83±0.35	6.32±0.15	14.54±0.25	0.50
PC90ELT25X8.6-Z									

Part No.(ELH+ELH)	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)	Amin. (mm^2)	Acw (mm^2)	Weigh (g)	AL-value (nH/N^2) 1kHz 0.5mA 100Ts	
								Without air gap	With air gap
PC95ELT18X7.3-Z	0.538	23.8	44.3	1050	43.0	20.9	6.0	4760±25%	80±3% 125±3% 200±5%
PC90ELT18X7.3-Z								3100±25%	
PC95ELT20X5.7-Z	0.393	21.6	54.9	1180	52.9	11.6	6.7	6270±25%	80±3% 125±3% 200±5%
PC90ELT20X5.7-Z								4150±25%	
PC95ELT20X7.7-Z	0.469	25.6	54.6	1400	52.9	23.2	7.8	5630±25%	80±3% 125±3% 200±5%
PC90ELT20X7.7-Z								3900±25%	
PC95ELT22X6-Z	0.351	23.4	66.6	1560	64.2	12.8	9.0	7250±25%	100±3% 160±3% 250±5%
PC90ELT22X6-Z								4800±25%	
PC95ELT22X8-Z	0.413	27.3	66.2	1810	64.2	25.5	10	6540±25%	100±3% 160±3% 250±5%
PC90ELT22X8-Z								4250±25%	
PC95ELT25X6.6-Z	0.302	26.0	86.0	2230	83.0	14.5	13	8600±25%	100±3% 160±3% 250±5%
PC90ELT25X6.6-Z								6100±25%	
PC95ELT25X8.6-Z	0.350	30.0	85.6	2570	83.0	29.0	15	7540±25%	100±3% 160±3% 250±5%
PC90ELT25X8.6-Z								5400±25%	

Mn-Zn Planar series **Part No.: PC90ELT11X3-Z**

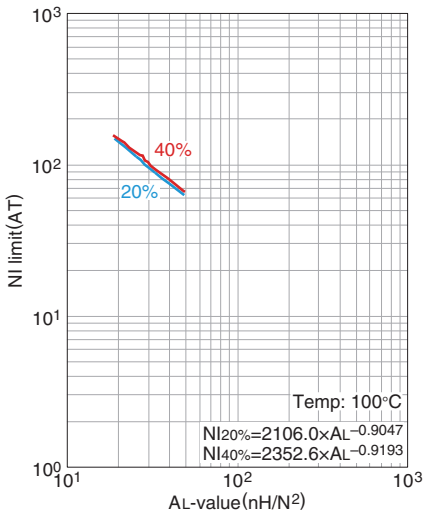
SHAPES AND DIMENSIONS



Dimensions in mm

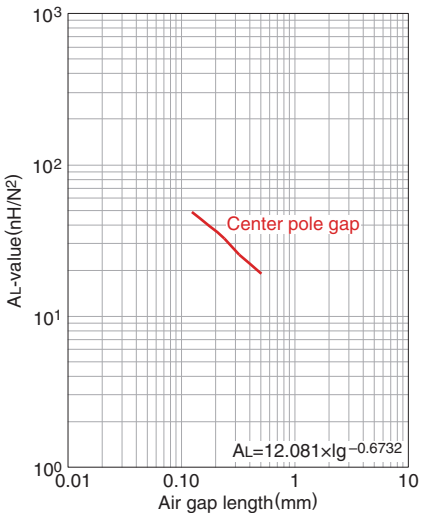
Effective parameter						Electrical characteristics	
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss
C1	ℓe	Ae	Ve	Acw			
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT 100°C
0.702	11.7	16.6	194	3.20	1.1	1750±25%	0.15

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.

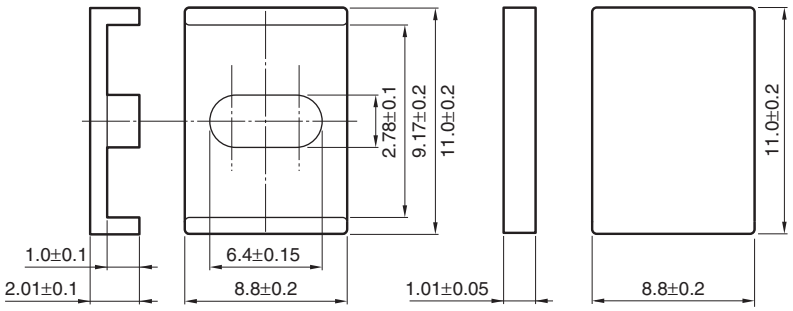
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT11X3-Z**

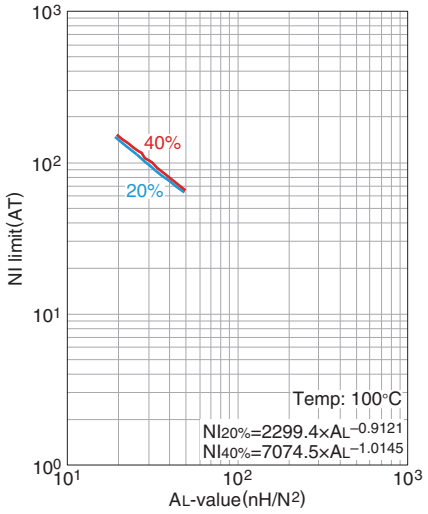
SHAPES AND DIMENSIONS



Dimensions in mm

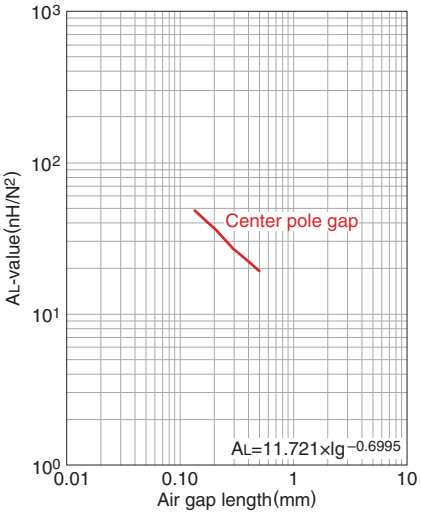
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.702	11.7	16.6	194	3.20	1.1	2590±25%	0.14	0.12	0.14

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.

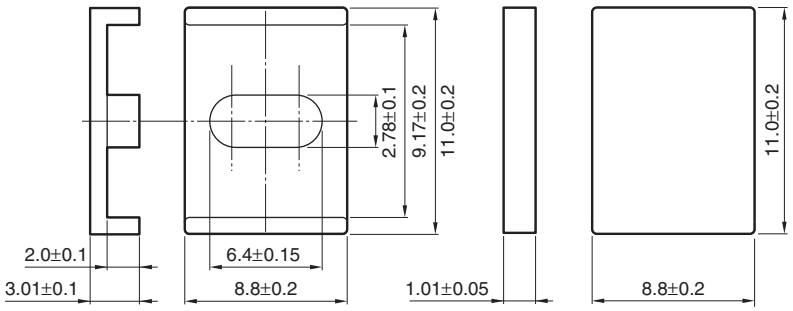
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC90ELT11X4-Z**

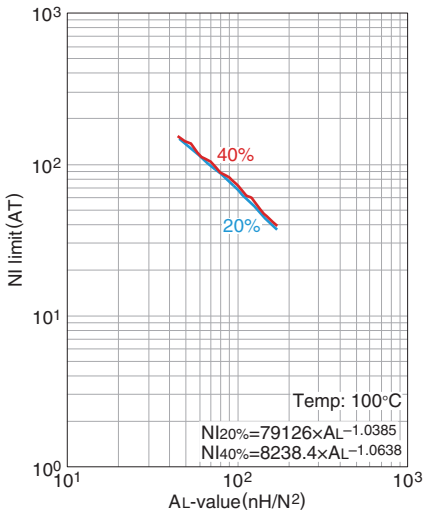
SHAPES AND DIMENSIONS



Dimensions in mm

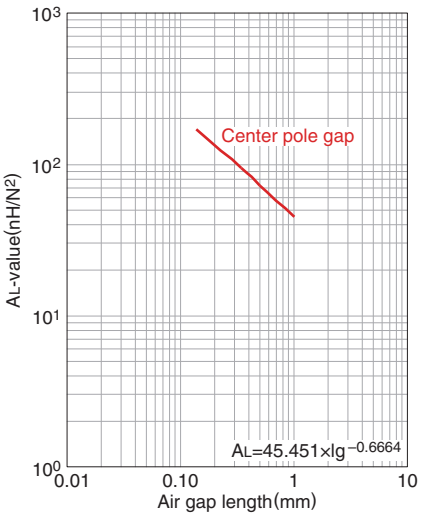
Effective parameter						Electrical characteristics	
Core factor C_1 (mm^{-1})	Effective magnetic path length ℓe (mm)	Effective cross-sectional area Ae (mm^2)	Effective core volume Ve (mm^3)	Cross-sectional winding area of core Acw (mm^2)	Weigh (g/set)	A_L-value * (nH/N^2) 1kHz 0.5mA	Core loss (W)max. 100kHz 200mT 100°C
0.826	13.7	16.5	226	6.39	1.3	1700±25%	0.18

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.

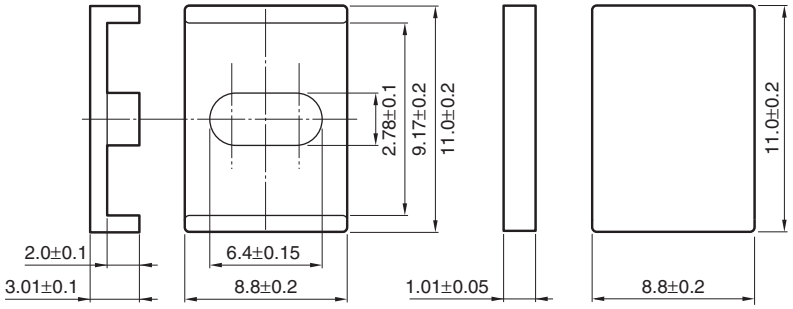
A_L-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT11X4-Z**

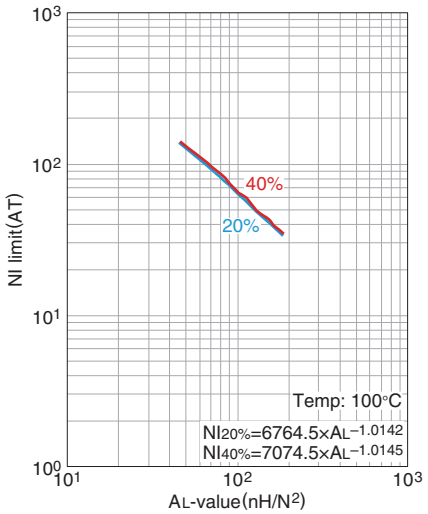
SHAPES AND DIMENSIONS



Dimensions in mm

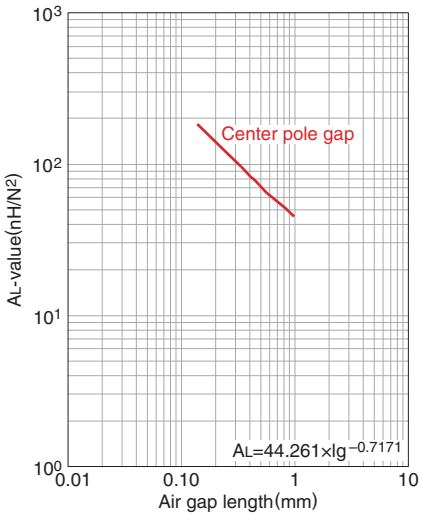
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.826	13.7	16.5	226	6.39	1.3	2400±25%	0.16	0.15	0.16

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.

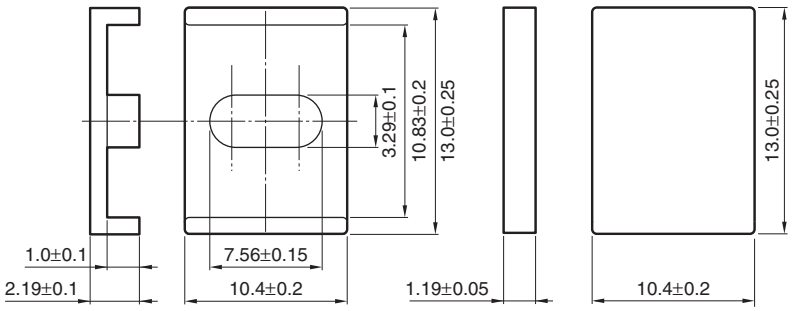
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC90ELT13X3.4-Z**

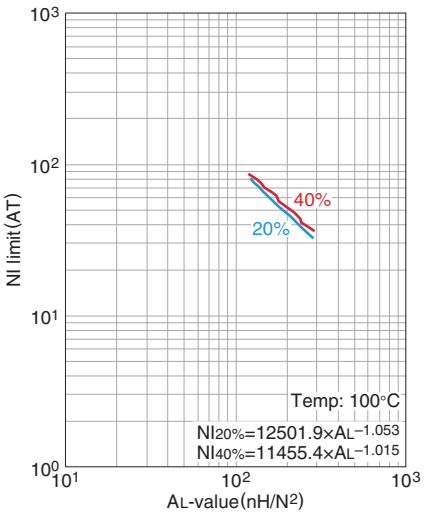
SHAPES AND DIMENSIONS



Dimensions in mm

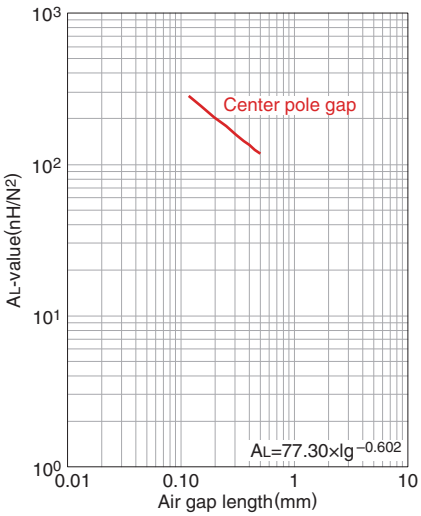
Effective parameter						Electrical characteristics	
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss
C1	ℓe	Ae	Ve	Acw			
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT 100°C
0.578	13.4	23.2	312	3.77	1.8	2400±25%	0.3

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.

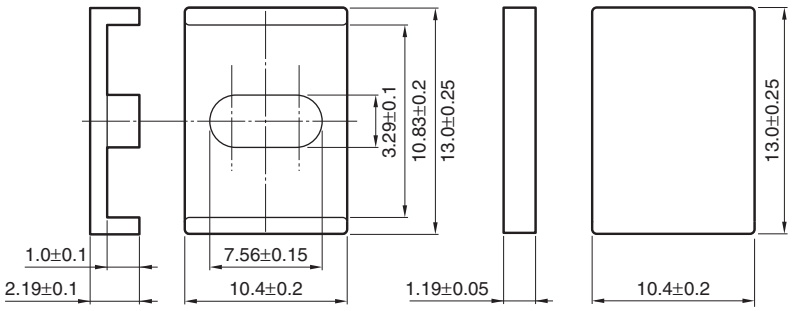
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT13X3.4-Z**

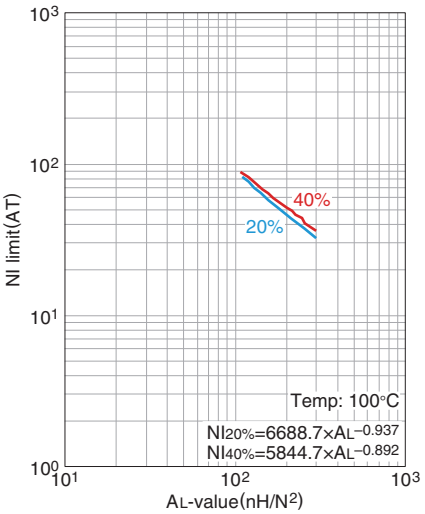
SHAPES AND DIMENSIONS



Dimensions in mm

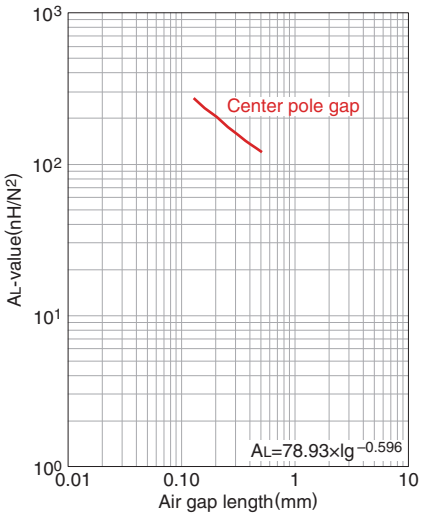
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.578	13.4	23.2	312	3.77	1.8	3390±25%	0.3	0.28	0.3

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.

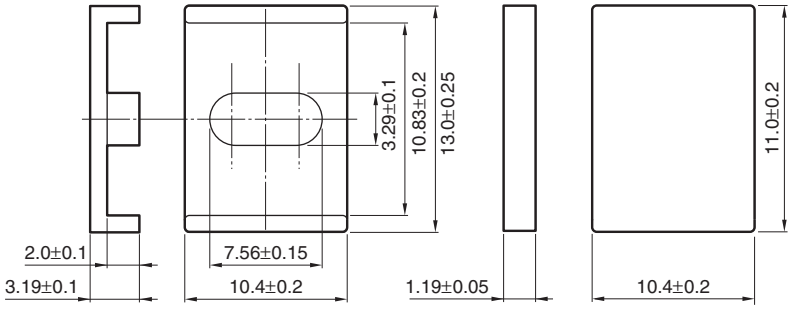
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC90ELT13X4.4-Z**

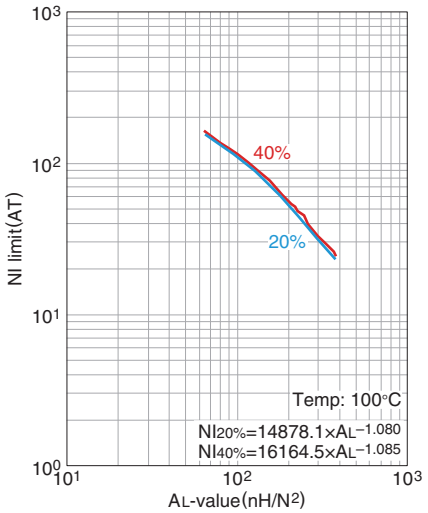
SHAPES AND DIMENSIONS



Dimensions in mm

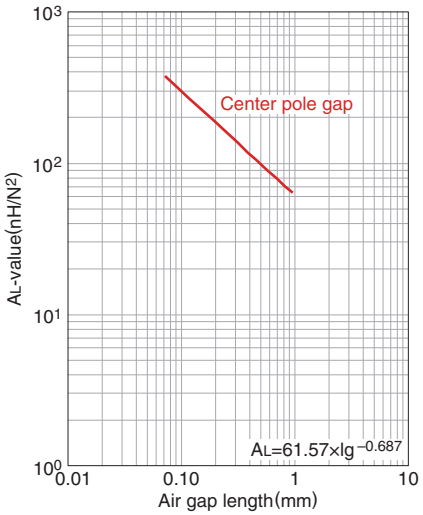
Effective parameter						Electrical characteristics	
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss
C1	ℓe	Ae	Ve	Acw			
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT 100°C
0.667	15.4	23.1	357	7.54	2.0	2300±25%	0.3

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.

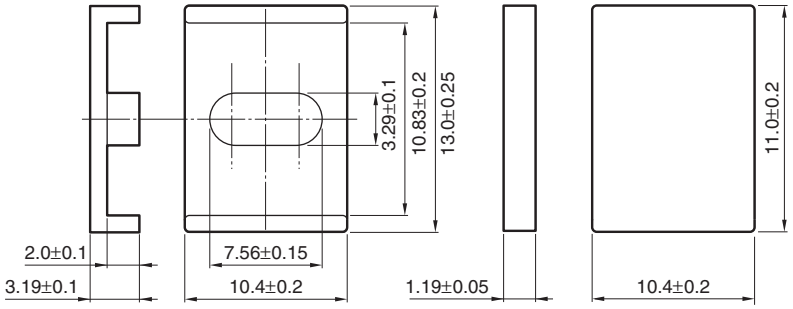
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT13X4.4-Z**

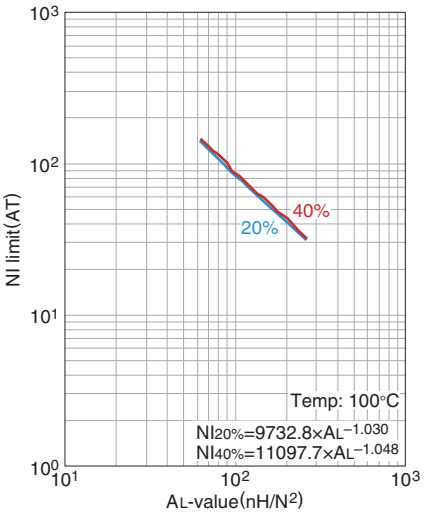
SHAPES AND DIMENSIONS



Dimensions in mm

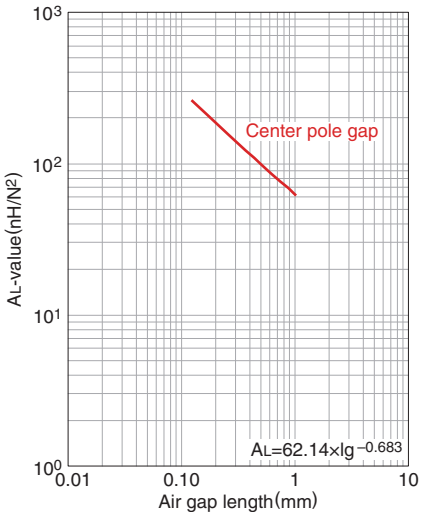
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.667	15.4	23.1	357	7.54	2.0	3160±25%	0.3	0.28	0.3

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.

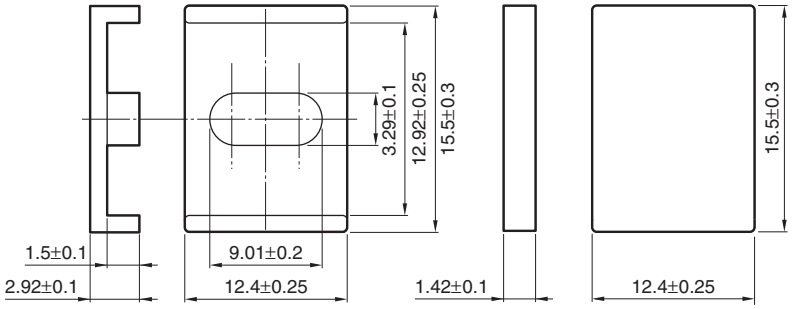
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC90ELT15.5X4.3-Z**

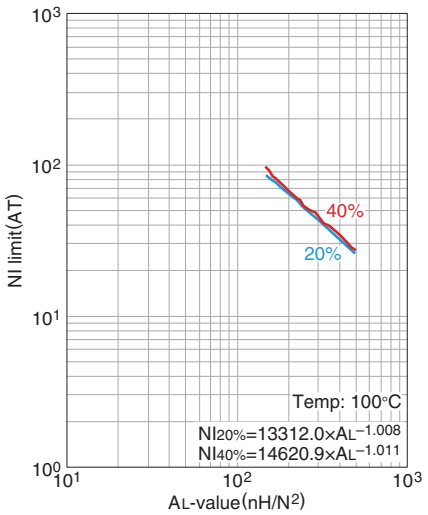
SHAPES AND DIMENSIONS



Dimensions in mm

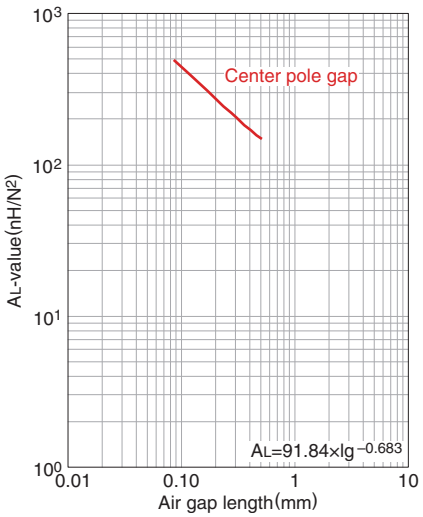
Effective parameter						Electrical characteristics	
Core factor C_1 (mm^{-1})	Effective magnetic path length ℓe (mm)	Effective cross-sectional area Ae (mm^2)	Effective core volume Ve (mm^3)	Cross-sectional winding area of core Acw (mm^2)	Weigh (g/set)	A_L-value * (nH/N^2) 1kHz 0.5mA	Core loss (W)max. 100kHz 200mT 100°C
0.503	16.6	33.1	550	6.75	3.0	2900±25%	0.5

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.

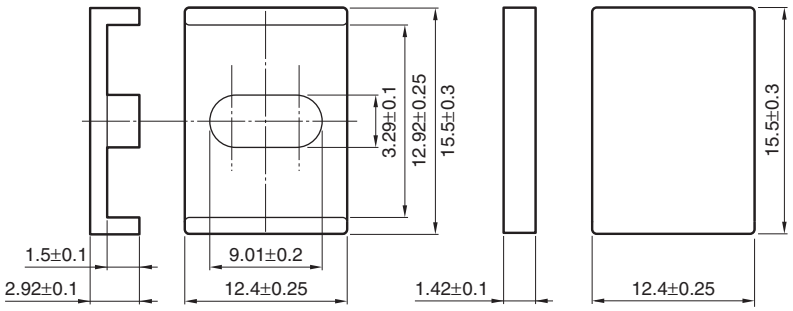
A_L-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT15.5X4.3-Z**

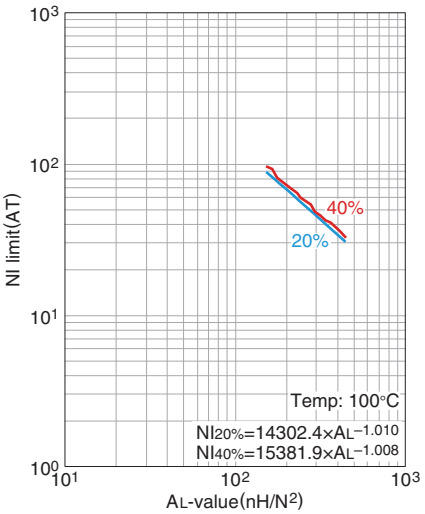
SHAPES AND DIMENSIONS



Dimensions in mm

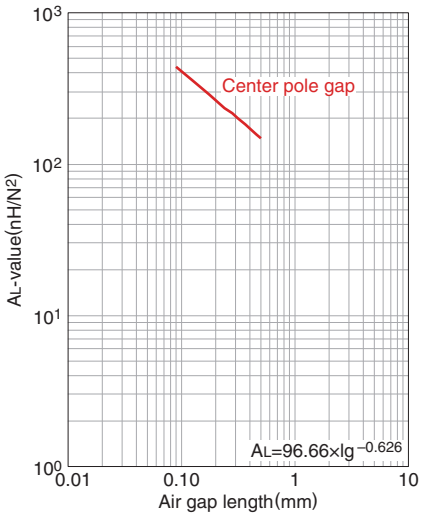
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.503	16.6	33.1	550	6.75	3.0	4340±25%	0.5	0.45	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.

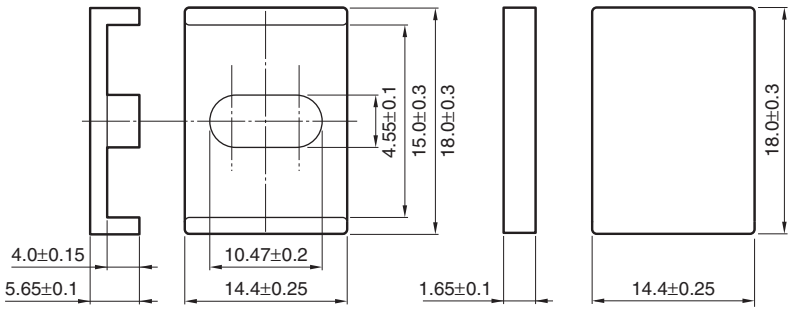
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC90ELT18X7.3-Z**

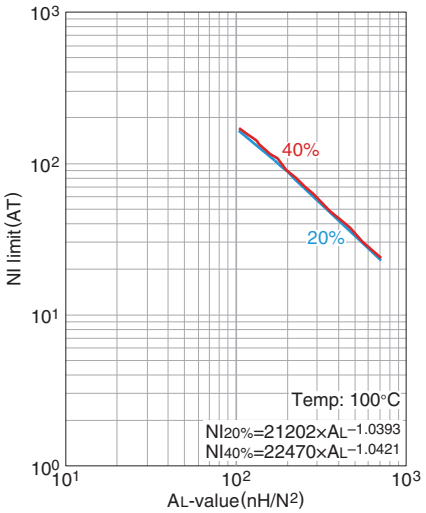
SHAPES AND DIMENSIONS



Dimensions in mm

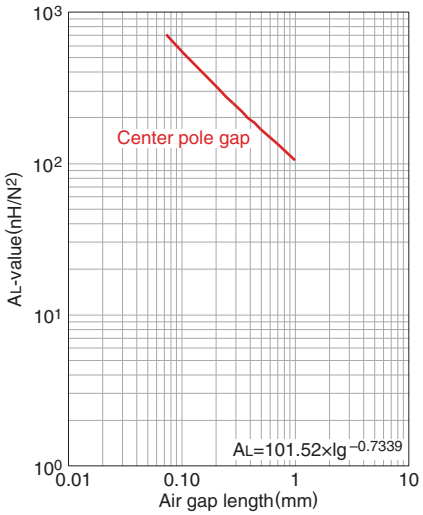
Effective parameter						Electrical characteristics	
Core factor C_1 (mm^{-1})	Effective magnetic path length ℓe (mm)	Effective cross-sectional area Ae (mm^2)	Effective core volume Ve (mm^3)	Cross-sectional winding area of core Acw (mm^2)	Weigh (g/set)	A_L-value * (nH/N^2) 1kHz 0.5mA	Core loss (W)max. 100kHz 200mT 100°C
0.538	23.8	44.3	1050	20.9	6.0	3100±25%	0.7

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.

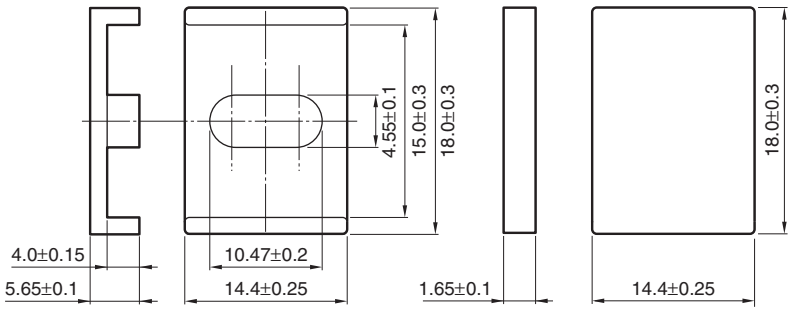
A_L-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT18X7.3-Z**

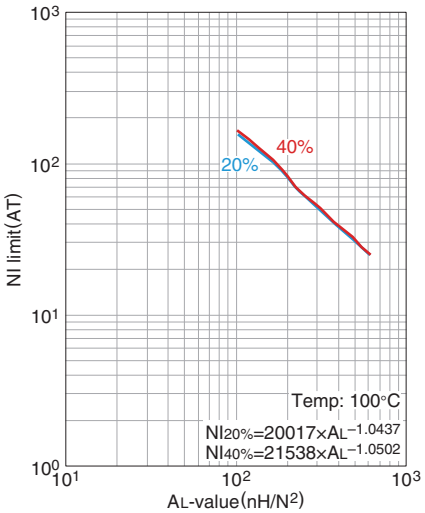
SHAPES AND DIMENSIONS



Dimensions in mm

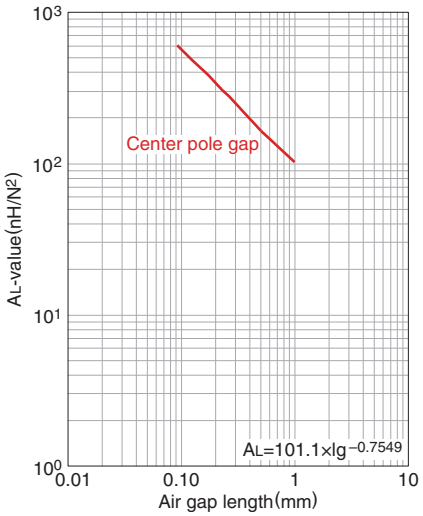
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm−1)	(mm)	(mm2)	(mm3)	(mm2)	(g/set)	(nH/N2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.538	23.8	44.3	1050	20.9	6.0	4760±25%	0.6	0.55	0.6

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.

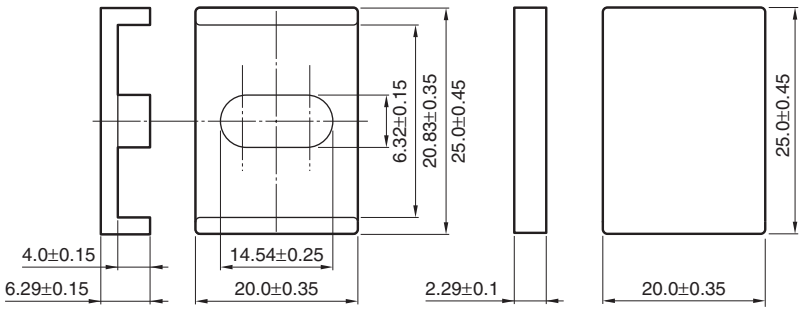
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC90ELT25X8.6-Z**

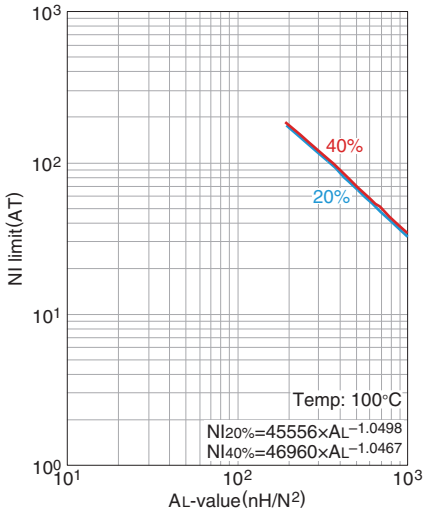
SHAPES AND DIMENSIONS



Dimensions in mm

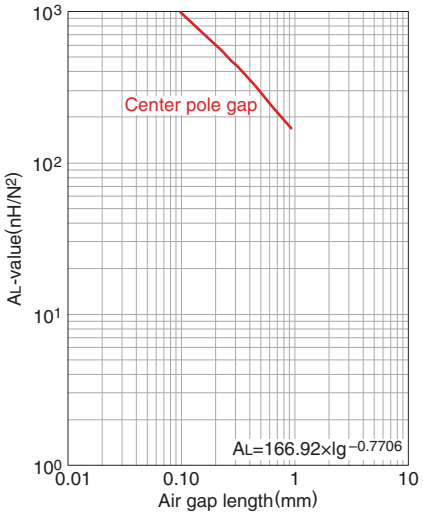
Effective parameter						Electrical characteristics	
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss
C1	ℓe	Ae	Ve	Acw			
(mm^{-1})	(mm)	(mm^2)	(mm^3)	(mm^2)	(g/set)	(nH/N^2) 1kHz 0.5mA	(W)max. 100kHz 200mT 100°C
0.350	30.0	85.6	2570	29.0	15	5400±25%	1.8

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.

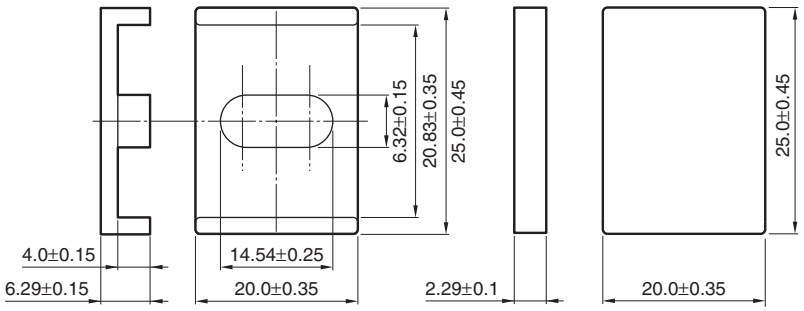
AL-value vs. Air gap length (Typ.)



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

Mn-Zn Planar series **Part No.: PC95ELT25X8.6-Z**

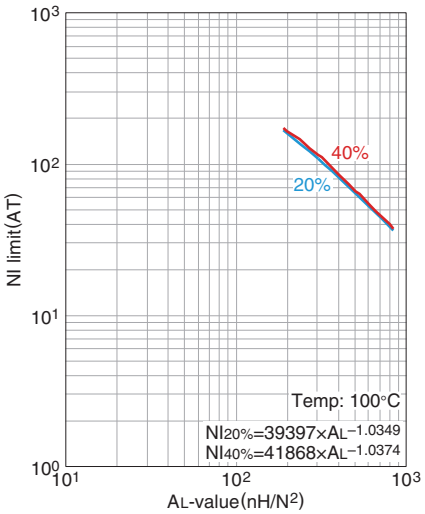
SHAPES AND DIMENSIONS



Dimensions in mm

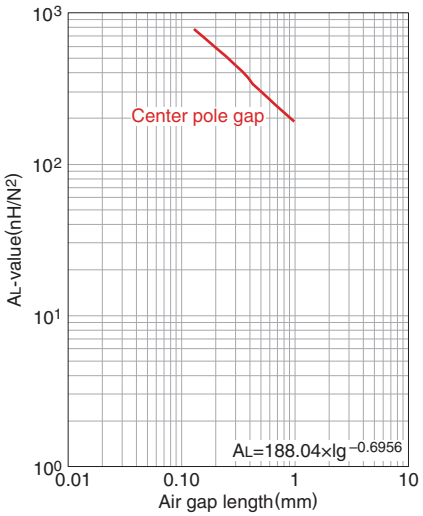
Effective parameter						Electrical characteristics			
Core factor	Effective magnetic path length	Effective cross-sectional area	Effective core volume	Cross-sectional winding area of core	Weigh	AL-value *	Core loss		
C1	ℓe	Ae	Ve	Acw					
(mm^{-1})	(mm)	(mm^2)	(mm^3)	(mm^2)	(g/set)	(nH/N^2) 1kHz 0.5mA	(W)max. 100kHz 200mT		
							25°C	80°C	120°C
0.350	30.0	85.6	2570	29.0	15	7540±25%	1.6	1.5	1.6

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