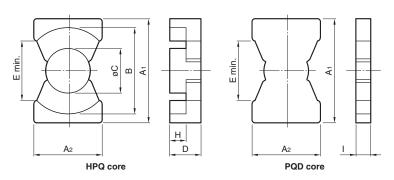
## FERRITES

## **公TDK**

# Mn-Zn PQI Cores

## **SHAPES AND DIMENSIONS**





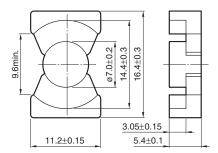
PC95	PQI16/7.8Z -	12
Material	Size of E core	AL-value (Z: without air gap)

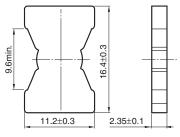
Part No.(HPQ+PQD)	Dimensions (mm)											
	<b>A</b> 1	<b>A</b> 2	В	øС	D	E min.	Н	1				
PC95PQI16/7.8Z-12	16.40±0.30	11.20±0.30	14.40±0.30	7.00±0.20	5.40±0.10	9.60	3.05±0.15	2.35±0.10				
PC90PQI16/7.8Z-12	10.40±0.30	11.20±0.30	14.40±0.30	7.00±0.20	3.40±0.10	9.00	3.03±0.13	2.35±0.10				
PC95PQI20/9Z-12	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	0.05.0.10				
PC90PQI20/9Z-12	20.50±0.40	14.00±0.40	16.00±0.40	0.00±0.20	6.00±0.10	12.00	3.05±0.15	2.95±0.10				
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	20.50±0.45	19.00±0.45	22.30±0.45	12.00±0.20	7.30±0.10	13.30	3.10±0.15	4.20±0.10				

	Effective para	ameter						Electrical charac	teristics
	Core factor	Effective cross-sectional area	Effective magnetic path length	Effective core volume	Amin.	Acw	Weigh	AL-value	
Part No.(ELH+ELH)	C <sub>1</sub> (mm <sup>-1</sup> )	Ae(mm²)	ℓe(mm)	Ve(mm <sup>3</sup> )	(mm²)	(mm²)	(g)	(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%
PC90PQI16/7.8Z-12	0.467	19.5	41.0	010	37.0	11.3	5.0	3600±25%	100±5% 160±7%
PC95PQI20/9Z-12	0.346	22.9	66.0	1510	59.3	14.0	9.0	7070±25%	100±3% 160±5%
PC90PQI20/9Z-12	0.540	22.3	00.0	1510	59.3	14.0	5.0	5200±25%	250±7%
PC95PQI26/12Z-12	0.224	27.7	123	3410	109	16.3	21	11950±25%	100±3% 160±3%
PC90PQI26/12Z-12	0.224	21.1	123	3410	109	10.5	21	8600±25%	250±5%

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

## **SHAPES AND DIMENSIONS**

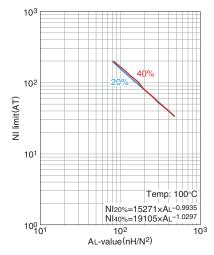




Dimensions in mm

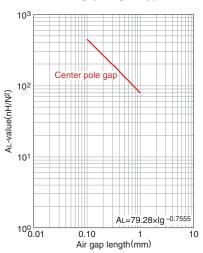
Effective par	ameter	Electrical characteristics					
Core factor	Effective magnetic path length	Effective cross-sectional	Effective core volume	Cross-sectional winding area of	Weigh	AL-value *	Core loss
		area		core			
C <sub>1</sub>	ℓe	Ae	Ve	Acw			
(mm <sup>-1</sup> )	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	(g/set)	(nH/N <sup>2</sup> )	(W)max.
						1kHz	100kHz
						0.5mA	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

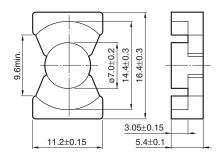
• Coil: Ø0.18 2UEW 100Ts

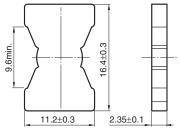
• Frequency: 1kHz

• Current level : 0.5mA

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

## **SHAPES AND DIMENSIONS**

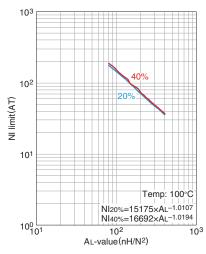




Dimensions in mm

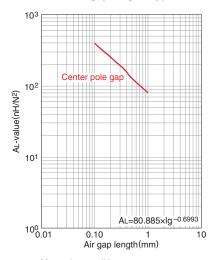
Effective para	Electrical characteristics								
Core factor	Effective magnetic path length	cross-sectional	Effective core volume	Cross-sectional winding area of	Weigh	AL-value *	Core loss	5	
C1	ℓe	area Ae	Ve	Acw					
(mm <sup>-1</sup> )	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	(g/set)	(nH/N <sup>2</sup> )	(W)max.		
						1kHz 0.5mA	100kHz 200mT	100kHz	
							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 ALvalue has been made due to the DC superimposition.

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



Measuring conditions • Coil: ø0.18 2UEW 100Ts

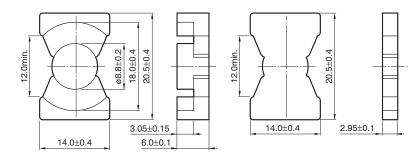
• Frequency : 1kHz

• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

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

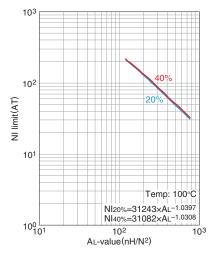
## **SHAPES AND DIMENSIONS**



Dimensions in mm

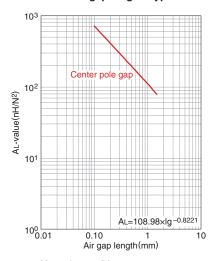
Effective para	meter	Electrical characteristics					
Core factor	Effective magnetic path length	cross-sectional	core volume	Cross-sectional winding area of	Weigh	AL-value *	Core loss
C <sub>1</sub>	ℓe	area Ae	Ve	Acw			
(mm <sup>-1</sup> )	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	(g/set)	(nH/N <sup>2</sup> )	(W)max.
						1kHz 0.5mA	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

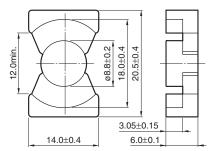
• Frequency : 1kHz

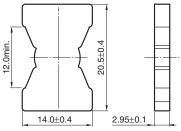
• Current level : 0.5mA

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

## **SHAPES AND DIMENSIONS**

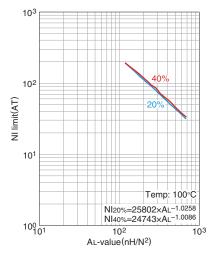




Dimensions in mm

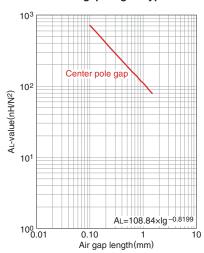
Effective para	Electrical characteristics								
Core factor	Effective magnetic path length	cross-sectional	Effective core volume	Cross-sectional winding area of	Weigh	AL-value *	Core loss	5	
C <sub>1</sub>	ℓe	area Ae	Ve	Acw					
(mm <sup>-1</sup> )	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	(g/set)	(nH/N <sup>2</sup> )	(W)max.		
						1kHz 0.5mA	100kHz 200mT	100kHz	
							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.)



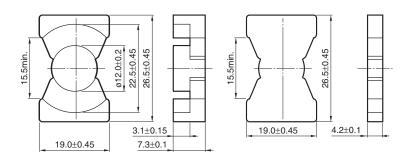
Measuring conditions
• Coil: Ø0.18 2UEW 100Ts

Frequency: 1kHzCurrent level: 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

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

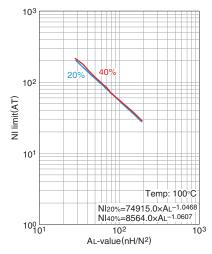
## **SHAPES AND DIMENSIONS**



Dimensions in mm

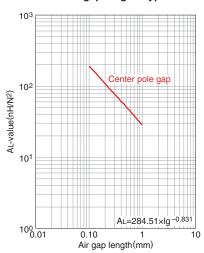
Effective parai	meter	Electrical characteristics					
Core factor	Effective magnetic path length	cross-sectional	Effective core volume	Cross-sectional winding area of	Weigh	AL-value *	Core loss
C1	ℓe	area Ae	Ve	Acw			
(mm <sup>-1</sup> )	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	(g/set)	(nH/N <sup>2</sup> )	(W)max.
						1kHz 0.5mA	100kHz 200mT
							100°C
0.224	27.7	123	3410	16.3	21	8600±25%	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.)

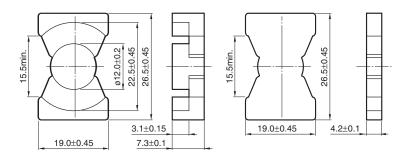


Measuring conditions
• Coil: Ø0.18 2UEW 100Ts
• Frequency: 1kHz

Current level : 0.5mA

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

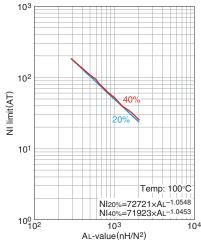
## **SHAPES AND DIMENSIONS**



Dimensions in mm

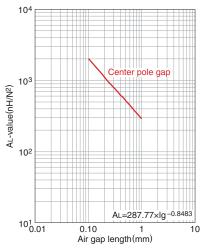
Effective para	Electrical characteristics								
Core factor	Effective magnetic path length	cross-sectional	Effective core volume	Cross-sectional winding area of	Weigh	AL-value *	Core loss		
C <sub>1</sub>	ℓe	area Ae	Ve	Acw					
(mm <sup>-1</sup> )	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	(g/set)	(nH/N <sup>2</sup> )	(W)max.		
						1kHz 0.5mA	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

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.