

# NANOCRYSTALLINE MAG-AMP CORE STANDARD CORE DIMENSIONS & SPECIFICATIONS

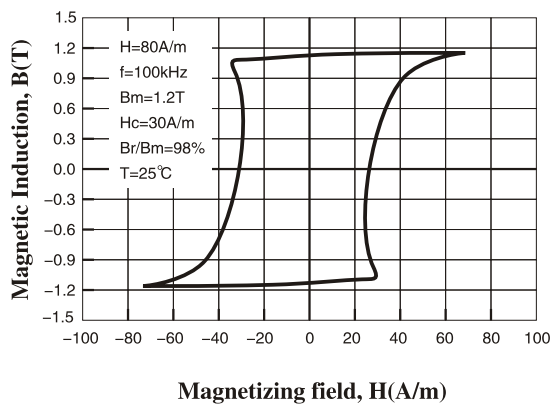
Part No.	Finished Core(mm) ①			$L_{eff}$ ②	$A_{eff}$ ③	$V_{eff}$ ④	$W_a$ ⑤	$\emptyset W_a$ ⑥	$\emptyset$ ⑦
	OD	ID	HT	(mm)	(mm <sup>2</sup> )	(mm <sup>3</sup> )	(mm <sup>2</sup> )	( $\mu$ Wb-mm <sup>2</sup> )	( $\mu$ Wb)
MN-10B-L	11.2	5.7	5.7	26.1	5.6	148	26	344	13.5
MN-11S-L	14.0	6.6	6.3	29.6	5.3	157	34	431	12.6
MN-13B-L	14.7	7.8	7.8	34.8	4.1	144	49	485	9.9
MN-15S-L	16.9	8.6	8.6	38.7	8.8	345	59	1254	21.1
MN-18S-L	19.8	10.4	10.4	45.7	9.5	438	85	1928	22.7

**Notes:**

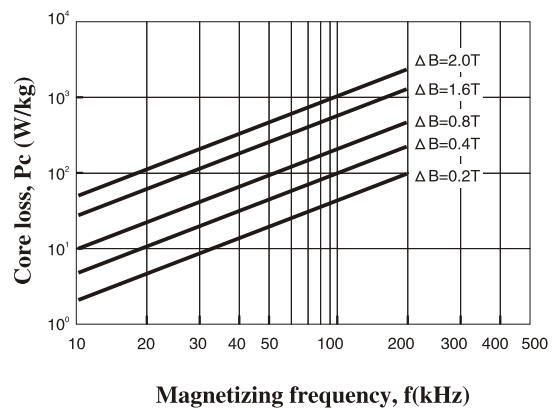
- ① The finished core dimensions shows a nominal ones. please consult sales department for tolerance.
- ② Norminal values of magnetic path length.
- ③ Norminal values of cross-section area.
- ④ Norminal values of volume.
- ⑤ Norminal values window area.
- ⑥ Norminal handling power factor.
- ⑦ The total flux with its tolerance of  $\pm 15\%$ . All values are measured at 100kHz, 80A/m, RT( $\sim 25^\circ\text{C}$ ).
- \* The squareness, Br/Bm(%). of all above listing part numbers is greater than 96% at 100kHz, 80A/m and 25°C.
- \*\* The coercive force field, Hc(A/m), of all above listing part number is lower than 36A/m at 100kHz, 80A/m and 25°C.
- \* \* \* If customer need the exact information's on each part number, please inquire of SHINHOM sales department.

## TYPICAL MAGNETIC CHARACTERISTICS

**Typical B-H loop shape@100kHz**



**Typical losses,  $P_c(f, \Delta B)$**



\* The core losses measured by sinusoidal waveforms in bipolar swing between +B to -B