

Toroidal Magamp Cores

Special features

High Bs value (1.23T) and less core size
 Low coercive field and small reset current
 Low core loss and less temperature rising
 High Curie temperature and good temperature stability
 Square BH loops and low saturated permeability

Application

Magnetic amplifiers in Switch-mode power supplies
 Pulse killer inductors
 Pulse transformer

Property

Major properties	-AR type		-SH type	
	10kHz	100kHz	10kHz	100kHz
Coercive force Hc (A/m)	6	25	10	30
Rectangular ratio Br/Bm at Bm=0.5T	0.8	0.9	0.9	0.96
Core loss Pc at Bm=0.5T (W/kg)	10	350	30	500

Specification

Product Code Name:

ANB- MA 12 08 05 - S H ANB- MA 12 08 05 - AR

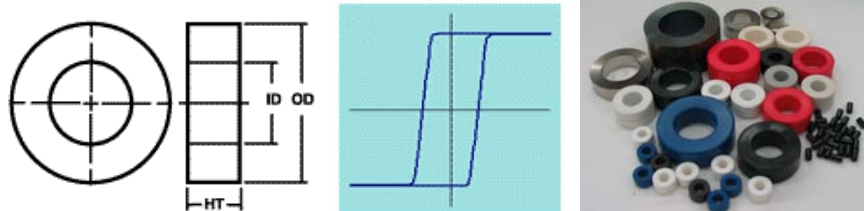
ANB: Company core code No. MA: Toroidal Magamp nanocrystalline core

12: core OD, 08: core ID, 05: core HT in mm

S: Fe-based nanocrystalline thin slit strip core H: Square BH loop

A: Fe-based nanocrystalline thick strip core R: Round BH loop

Square BH loop H



Product Code No.	Finished size			le cm	Ac cm ²	Vc cm ³	Wa cm ²	WaAc cm ⁴	ϕ_m μWb
	OD	ID	HT						
100705-SH	11.3	5.3	5.8	2.57	0.058	0.148	0.215	0.01	14.3
110705-SH	12.5	5.6	~	2.83	0.08	0.226	0.246	0.02	19.7
120805-SH	14.2	6.5	7.0	3.22	0.063	0.20	0.33	0.02	15.5
141005-SH	15.5	8.5	6.8	3.77	0.08	0.294	0.56	0.05	19.7
140806-SH	16.0	6.0	8.3	3.50	0.14	0.49	0.28	0.04	34.4
150905-SH	17.0	7.5	6.4	3.71	0.131	0.486	0.442	0.06	32.2
151006-SH	17.9	8.5	9.2	3.93	0.13	0.51	0.57	0.07	32.0
151045-SH	16.5	8.4	6.6	3.87	0.092	0.356	0.553	0.05	22.6
151245-SH	16.6	10.5	6.2	4.24	0.05	0.212	0.865	0.04	12.3
161005-SH	18.1	8.6	7.4	4.08	0.13	0.530	0.58	0.07	32.0
161108-SH	18.3	8.3	10	4.24	0.17	0.721	0.54	0.09	41.8
181305-SH	21.1	9.9	7.3	4.95	0.12	0.594	0.77	0.09	29.5
181108-SH	20.5	9.3	9.7	4.55	0.24	1.092	0.68	0.16	59.0
181110-SH	20.4	9.4	12.2	4.55	0.30	1.365	0.68	0.21	73.8
191005-SH	21	8.2	6.9	4.55	0.19	0.865	0.53	0.10	46.7
201205-SH	21.7	10.7	7.9	5.02	0.13	0.653	0.90	0.15	32.0
201208-SH	22.3	10.2	10.4	5.02	0.27	1.355	0.82	0.22	66.4
211106-SH	23.5	9	8.5	5.81	0.21	1.220	0.64	0.17	51.7
231604-SH	25	14.1	5.9	6.13	0.11	0.674	1.54	0.17	27.1
261610-SH	28.3	14	12.5	6.59	0.43	2.834	1.5	0.65	105.8
261910-SH	28.7	16.5	12.6	7.07	0.30	2.121	2.1	0.64	73.8
302010-SH	33	18.1	13	7.85	0.43	3.376	2.6	1.09	105.8
322010-SH	34.2	18	13	8.16	0.51	4.162	2.5	1.30	125.5
332310-SH	33.6	17.8	22	8.79	0.43	3.780	2.5	1.06	105.8
332320-SH	33.6	17.8	32	8.79	0.85	7.472	2.5	2.12	209.1
402510-SH	44.5	21	14	10.21	0.64	6.534	3.5	2.21	157.4

Note: le: mean magnetic path length Ac: effective cross-section area
 Wa: Core window area for wire winding, WaAc: Area product
 $2\phi_m$: Total flux (=2×Bs×Ac)
 Other core size maybe available according to customer's special request