

The Heartbeat of the IoT™

POWER INDUCTO

For use in switch-mode power supplies (SMPS), DC-DC converters, and high power passive filters

CHIP INDUCTORS (ASMPH AND ASMCI)

Compact chip inductors support -40°C to 85°C temperature range



SERIES	INDUCTOR TYPE	INDUCTANCE RANGE (μΗ)	CURRENT RATING RANGE (mA)	DCR RANGE (Ohms)	SMALLEST FOOTPRINT AVAILABLE (mm)	APPLICATION
ASMPH-0603	Chip	0.22 to 2.2	300 to 1250	0.1 to 0.3	1.6 x 0.8 x 0.8	IoT
ASMPH-0805	Chip	0.47 to 4.7	280 to 1200	0.08 to 0.25	2.0 x 1.25 x 0.9	Wearables
ASMPH-0806	Chip	0.47 to 4.7	220 to 1500	0.08 to 0.14	2.0 x 1.6 x 0.9	Portable and battery operated
ASMPH-1008	Chip	0.47 to 4.7	320 to 1500	0.04 to 0.11	2.5 x 2.0 x 0.9	Industrial
ASMCI-0603	Power	0.1 to 10	50 to 700	0.14 to 0.9	1.6 × 0.8 × 0.8	Consumer Point-of-load
ASMCI-0805	Power	0.1 to 10	60 to 1000	0.07 to 0.5	2.0 x 1.25 x 1.25	

OW PROFILE SMD SHIELDED INDUCTORS

ASPI series inductors are designed for medium to high power applications requiring high inductance and compact form factors. These inductors tolerate high operating temperatures including self heating.





		LIEIGUE						@10	μН	OPERATING	
SERIES SIZE / DIMENSION (mm)	HEIGHT (mm)	0.1	1	10	100	1000	IRATED (A)	DCR (Ω)	TEMPERATURE (°C)	APPLICATIONS	
ASPI-2010	2.00 x 1.60	1.00	0.47		10					-40 to 125	•
ASPI-2510	2.50x 2.00	1.00	6.80		10			0.56	0.712	-25 to 120	
ASPI-2515	2.50 x 2.00	1.50	0.47		10			0.75	0.445	-25 to 120	
ASPI-0309	3.00 x 3.00	0.90		2.20		47		0.43	0.640	-30 to 100	
ASPI-0315FS	3.00 x 3.00	1.50	1.	00		100		0.80	0.220	-25 to 120	
ASPI-0418FS	4.00 × 4.00	1.80	0.82			2:	20	1.30	0.150	-25 to 120	
ASPI-4030S	4.00 × 4.00	3.00	0.91			120		1.50	0.100	-40 to 125	Industrial
ASPI-0428S	4.70 × 4.70	3.00		1.20		180		1.00	0.128	-40 to 95	Instrumentation Computing/
ASPI-0530LR	5.60 x 5.20	3.00		1.50	5	.60				-55 to 125	servers
ASPI-0615FS	6.00 x 6.00	2.20	0.50			47		1.50	0.090	-25 to 120	Medical Lighting
ASPI-6045S	6.00 x 6.00	4.50	0.8	82		33	30	2.45	0.048	-40 to 125	Portable/batter
ASPI-0403S	6.60 x 4.45	2.92		1.00			1000	1.00	0.075	-40 to 85	powered
ASPI-0630LR	7.20 x 6.65	3.00	0.47		2	22		4.00	0.068	-55 to 125	Point-of-load
ASPI-7318	7.30 x 6.80	3.00	0.10			22		3.00	0.105	-55 to 125	
ASPI-8040S	8.00 x 8.00	4.20	0.82			33	30	3.30	0.029	-40 to 125	
ASPI-104S	10.10 × 10.00	4.00		7.0	0		470	3.80	0.035	-40 to 85	
ASPI-1040HI	11.15 × 10.00	4.00	0.16		10			7.50	0.030	-55 to 125	
ASPI-1367	14.00 × 12.90	6.70	0.10		10			10.00	0.019	-40 to 125	
ASPI-1306T	18.54 x 15.24	7.11	1	1.00			1000	4.30	0.031	-40 to 85	

HIGH POWER TOROID INDUCTORS BY ABRACON



ATCA toroid inductors utilizing high efficiency, powdered iron core are designed for high power applications where throughhole assembly technology is used. Unshielded, the toroidal form-factor inherently suppresses EMI. Supporting either vertical or horizontal orientations, these inductors can be placed in orthogonal orientation with respect to each other, further reducing coupling and crosstalk due to EMI. They support current rating up to 10A and extended operating temperature range of -40°C to 105°C.

PART NUMBER (NOT INCLUDING INDUCTANCE CODE)	INDUCTANCE RANGE (μH)	DCR RANGE (mΩ)	IDC RANGE (A)	APPLICATIONS
ATCA-01-XXXM	20-220	21-190	1.0-5.0	
ATCA-02-XXXM	22-470	14-286	1.0-5.0	Industrial High power SMPS
ATCA-03-XXXM	25-230	16-159	1.0-5.0	LED ballasts
ATCA-04-XXXM	50-960	22-150	1.0-5.0	Lighting
ATCA-05-XXXM	90-1800	34-680	1.0-5.0	White goods Appliances
ATCA-06-XXXM	820-780	33-342	1.0-5.0	High power passive
ATCA-07-XXXM	30-850	9-211	2.0-10.0	filters
ATCA-08-XXXM	75-680	14-105	5.0-10.0	









		AIUR	AIRD		AISC		
	SERIES	INDUCTOR TYPE	INDUCTANCE RANGE (μΗ)	CURRENT RATING RANGE (A)	DCR RANGE (Ohms)	SMALLEST FOOTPRINT AVAILABLE (mm)	
	AISM-1008	Molded Wire-Wound	0.01 to 100	0.06 to 0.55	0.26 to 21	2.5 x 2.0 x 1.8	
	AISM-1210	Molded Wire-Wound	0.01 to 330	0.04 to 0.45	0.13 to 34	3.2 x 2.5 x 2.2	
	AISM-1812	Molded Wire-Wound	0.1 to 820	0.03 to 0.80	0.2 to 43	4.8 x 3.5 x 3.5	
	AISM-1812H	Molded Wire-Wound	1 to 330	0.09 to 1.05	0.11 to 13	4.5 x 3.2 x 3.2	
	AISM-2220	Molded Wire-Wound	1 to 1000	0.085 to 1.8	0.03 to 15	5.8 x 5.2 x 5.2	
	AISC-1206H	Unshielded	45nH to 0.68mH	0.3 to 4.4	0.027 to 8.45	3.2 x 1.6 x 1.8	
	AISC-1210HS	Wire-Wound	2.2 to 33	0.22 to 0.8	1 to 5	3.2 x 3.05 x 1.3	
	AISC-1812H	Unshielded	1 to 2200	0.03 to 1.08	0.08 to 65	4.5 x 3.2 x 2.6	
	AISC-2220H	Unshielded	120nH to 10mH	0.05 to 6.0	0.01 to 140	5.7 x 5.0 x 4.7	
	AIRD	Drum Core	1uH to 19mH	0.5 to 27.0	0.002 to 0.7	21.0 x 16.5	
	AISR-01	Drum Core	1mH to 120mH	0.008 to 0.39	1.5 to 97	10.5 x 10.5	
	AISR-04	Drum Core	10 to 820	0.43 to 3.9	0.02 to 1.3	10.5 × 10.5	
	AISR-875	Drum Core	10uH to 10mH	0.084 to 2.9	0.05 to 33	7.5 x 7.8	
	AIUR	Drum Core	1uH to 68mH	0.02 to 95.0	0.012 to 80	7.5 x 8.5	