



# 深圳市磁立方科技有限公司

ShenZhen Magnetic Cube Technology Co., LTD.



## APT0480 SERIES



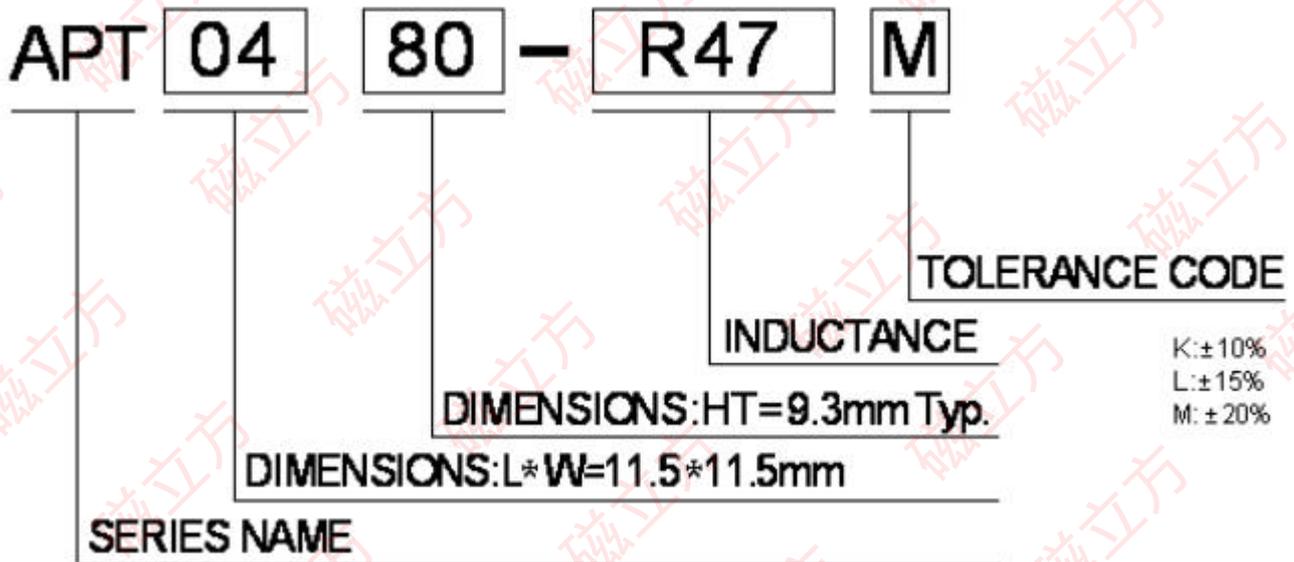
### Features

- Ultra low cost.
- Shielded construction.
- High frequency range up to 1.0 MHz.
- Very low DC resistance.
- Easy customized.
- All lead-free. (RoHS).

### Applications

- Motherboards for laptop and desktop computers.
- DC/DC converter in distributed power systems or VRM applications.
- Inductor for general purpose use.

### Part numbering system

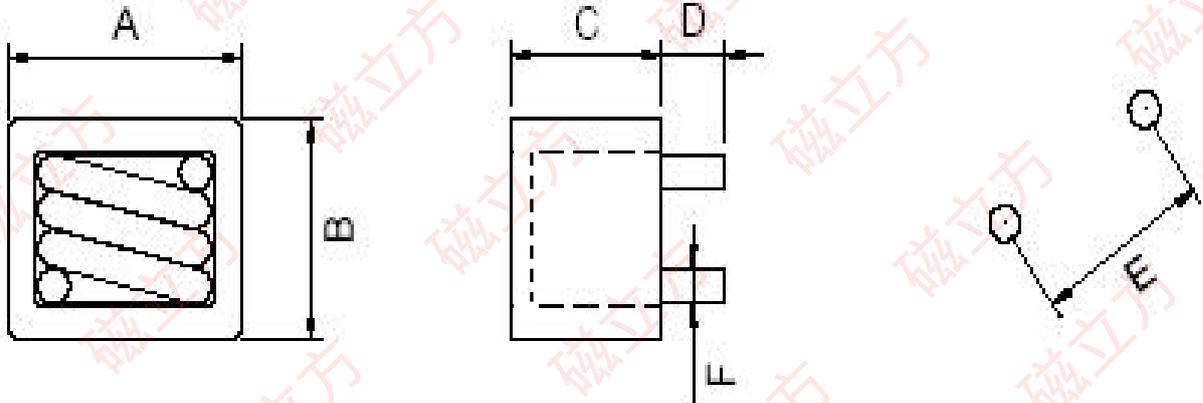


### Packing information:

Series Name	Qty. per inner box (mm)		Outer Box (mm)	
	APT0480	1000Pcs	238*156*160	2000Pcs

### APT0480 SERIES

#### Mechanical dimension: Unit: mm



PART No.	A	B	C	D	E	F
APT0480-R47M	11.7MAX	11.7MAX	9.7MAX	3.5±0.5	8.7±1	1.5±0.1
APT0480-R60M	11.7MAX	11.7MAX	9.7MAX	3.5±0.5	8.7±1	1.5±0.1
APT0480-R80M	11.7MAX	11.7MAX	9.7MAX	3.5±0.5	8.4±1	1.3±0.1
APT0480-1R0M	11.7MAX	11.7MAX	9.7MAX	3.5±0.5	8.4±1	1.3±0.1

#### Electrical Characteristics:

PART No.	L(0A) ( $\mu\text{H}\pm 20\%$ )	DCR ( $\text{m}\Omega$ ) MAX	L(rms) ( $\mu\text{H}\pm 20\%$ )	I <sub>rms</sub> (Amperes)	I <sub>sat</sub> (Amperes)	PIN TO PIN
APT0480-R47M	0.47	0.90	0.41	34	50	
APT0480-R60M	0.60	0.90	0.56	33	50	
APT0480-R80M	0.80	1.50	0.73	32	45	
APT0480-1R0M	1.00	1.50	0.92	30	45	

**NOTE:**

1. All test data is referenced to 25°C ambient, test condition 100KHz, 1.0V.
2. I<sub>rms</sub>: DC current(A) that will cause an approximate  $\Delta T$  of 40°C.
3. I<sub>sat</sub>: DC current(A) that will cause L<sub>o</sub> to drop approximate 20%.
4. Operating temperature range is -40°C to 120°C.
5. The part temperature(ambient and temp rise) should not exceed 125°C under worse case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.