

# METAL ALLOY MULTILAYER CHIP POWER INDUCTOR



ASMPM-0806 Series

Request Samples



Check Inventory



2.0 x 1.6 x 1.0 mm  
RoHS/RoHS II Compliant  
MSL Level = 2

## Features

- Miniature metal alloy chip inductor
- High-current capability in a compact 2.0 x 1.6mm size
- Low profile (1.0mm max) for height-restricted applications
- Up to 4.5A saturation current
- High inductance up to 4.7 $\mu$ H
- Wide operating temperature range: -40°C to 125°C
- Shielded construction reduces EMI

## Applications

- IoT and IIoT
- Wearables
- Hand-held devices
- Audio/Video, cameras and speakers
- Drones
- Medical monitoring
- Compact, energy-efficient lighting
- Battery-operated devices
- DC-DC supplies for battery chargers, Bluetooth and RF modules

## Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance	Saturation Current		Temperature Rise Current	
	1MHz/1V		Max	Typ	Max	Typ	Max
Units	$\mu$ H	%	m $\Omega$	A		A	
Symbol	L	M	DCR	Isat		Irms	
ASMPM-0806-R47	0.47	$\pm$ 20%	40	4.50	4.00	3.60	3.10
ASMPM-0806-1R0	1.0	$\pm$ 20%	70	3.40	3.10	2.60	2.20
ASMPM-0806-1R5	1.5	$\pm$ 20%	110	2.80	2.50	2.10	1.80
ASMPM-0806-2R2	2.2	$\pm$ 20%	168	2.20	2.00	1.60	1.40
ASMPM-0806-3R3	3.3	$\pm$ 20%	225	1.90	1.50	1.40	1.20
ASMPM-0806-4R7	4.7	$\pm$ 20%	360	1.50	1.30	1.10	0.95

## Test Conditions

**Isat:** DC current at which the inductance drops 30% from its nominal value.

**Irms:** DC current that causes the temperature rise ( $\Delta$ T, approximate 40 °C) from 25°C ambient.

**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise)

**Storage Condition:** -40°C ~ +125°C (on board), -10°C ~ +40°C (with packaging)

ASMPM-0806 Series is **RoHS Compliant and Pb free.**

# METAL ALLOY MULTILAYER CHIP POWER INDUCTOR



**ASMPM-0806 Series**

Request Samples

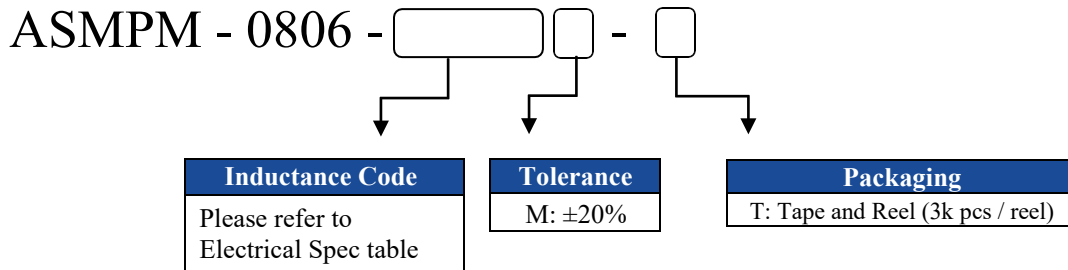


Check Inventory

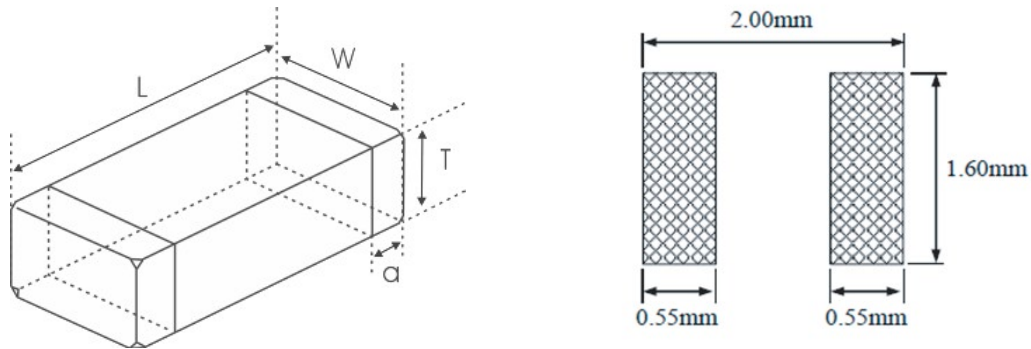


**2.0 x 1.6 x 1.0 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 2**

## Part Identification



## Mechanical Specifications



Series	L	W	T	a
<b>ASMPM-0806</b>	$2.0 \pm 0.2$	$1.6 \pm 0.2$	1.0 Max.	$0.5 \pm 0.3$

**Dimension: mm**



5101 Hidden Creek Ln, Spicewood TX 78669  
 Phone: 512-371-6159 Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

**REVISION B : 8/23/2023**

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# METAL ALLOY MULTILAYER CHIP POWER INDUCTOR



**ASMPM-0806 Series**

Request Samples

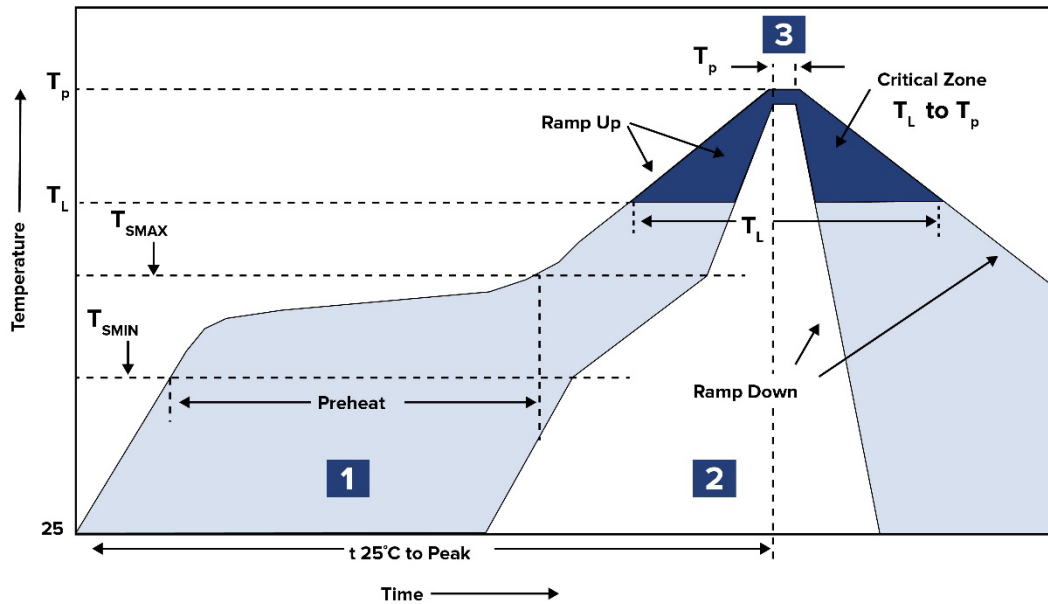


Check Inventory



**2.0 x 1.6 x 1.0 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 2**

## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	$T_L$ 230°C	30 sec. Max
3	Peak heat	$T_P$ 260°C	10 sec. MAX

# METAL ALLOY MULTILAYER CHIP POWER INDUCTOR



**ASMPM-0806 Series**

Request Samples



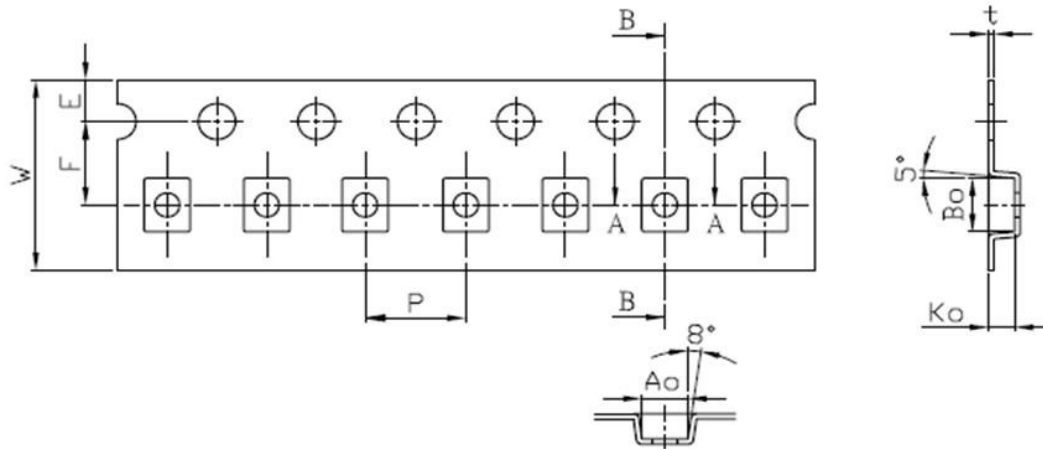
Check Inventory



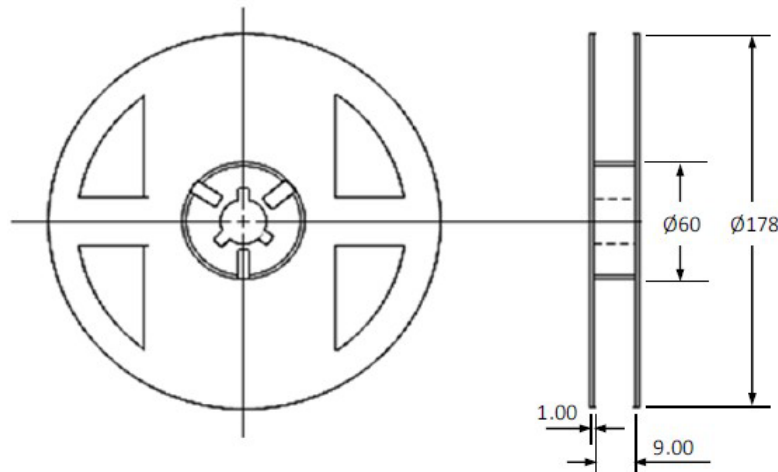
**2.0 x 1.6 x 1.0 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 2**

## Packaging

**Tape & Reel: 3000 pcs/reel**



Ao	Bo	Ko	P	W	t	E	F
1.85	2.25	1.05	4.00	8.00	0.22	1.75	3.50



**Dimensions: mm**

**ATTENTION:** Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln, Spicewood TX 78669  
 Phone: 512-371-6159 Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

**REVISION B : 8/23/2023**

ABRACON IS  
 ISO9001-2015  
 CERTIFIED