



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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# LOW PROFILE MULTILAYER POWER INDUCTOR



ASMPL

1.6 x 0.8 x 0.5 mm  
2.0 x 1.25 x 0.5 mm  
MSL = 1

RoHS/RoHS II Compliant

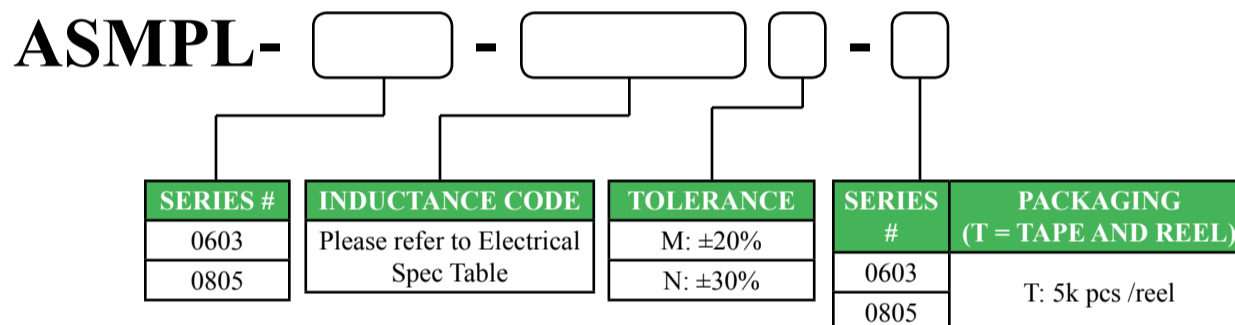
## FEATURES

- Miniature ceramic chip inductors
- High current carrying in a compact 1.6 x 0.8mm or 2.0 x 1.25mm footprint
- Low profile 0.5mm MAX for height restricted applications
- Excellent 1.45A saturation current
- High inductance up to 2.2μH
- Wide operating temperature range -40°C ~ +125°C

## APPLICATIONS

- IoT and IIoT
- Wearables
- Drones
- Smart watches
- Hand-held devices
- Audio/video, cameras, and speakers
- VR/AR and smart glasses
- Medical monitoring
- Battery operated devices
- DC/DC supplies for Bluetooth and RF modules
- High efficiency battery chargers
- High efficiency switch mode power supplies

## OPTIONS AND PART IDENTIFICATION



## ELECTRICAL SPECIFICATIONS

OPERATING TEMPERATURE	STORAGE CONDITION
-40°C - 125°C (including self-temperature rise)	-40°C - +85°C and R.H. 70%max

PART NUMBER	INDUCTANCE	TOLERANCE	SELF-RESONANT FREQUENCY	DC RESISTANCE	SATURATION CURRENT	TEMPERATURE RISE CURRENT
	0.1MHz/0.1V		min	max	max	max
UNITS	μH	%	MHz	mΩ	A	A
SYMBOL	L	M	SRF	DCR	Isat	Irms
ASMPL-0603-R22	0.22	±20%, ±30%	180	150	1.45	1.20
ASMPL-0603-R33	0.33	±20%, ±30%	140	200	1.35	1.10
ASMPL-0603-R47	0.47	±20%, ±30%	120	225	1.05	1.15
ASMPL-0603-R68	0.68	±20%, ±30%	100	275	0.80	0.90
ASMPL-0603-1R0	1.0	±20%, ±30%	90	400	0.70	0.80
ASMPL-0805-R22	0.22	±20%, ±30%	100	88	1.20	1.60
ASMPL-0805-R33	0.33	±20%, ±30%	90	125	1.35	1.20
ASMPL-0805-R47	0.47	±20%, ±30%	80	150	1.30	1.10
ASMPL-0805-1R0	1.0	±20%, ±30%	40	238	0.70	0.80
ASMPL-0805-1R5	1.5	±20%, ±30%	35	325	0.50	0.70
ASMPL-0805-2R2	2.2	±20%, ±30%	30	400	0.35	0.60

REVISED: 10.06.2017

# LOW PROFILE MULTILAYER POWER INDUCTOR

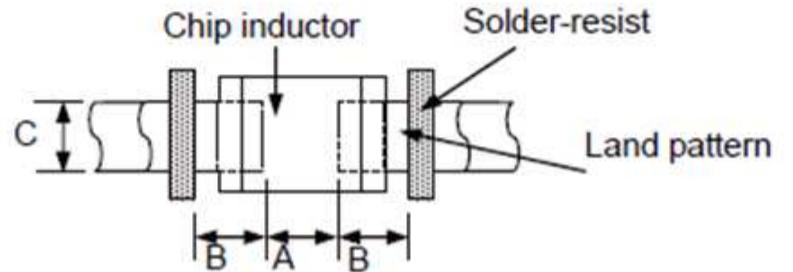
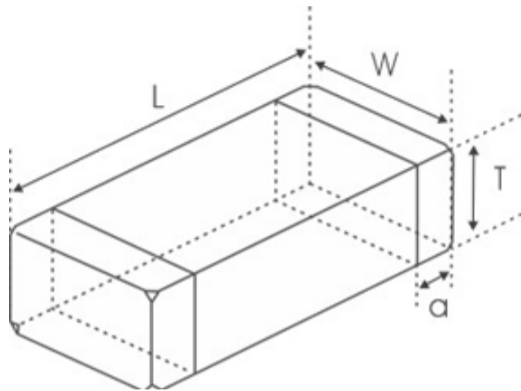


AS MPL

1.6 x 0.8 x 0.5 mm  
2.0 x 1.25 x 0.5 mm  
MSL = 1

RoHS/RoHS II Compliant

## MECHANICAL DIMENSIONS

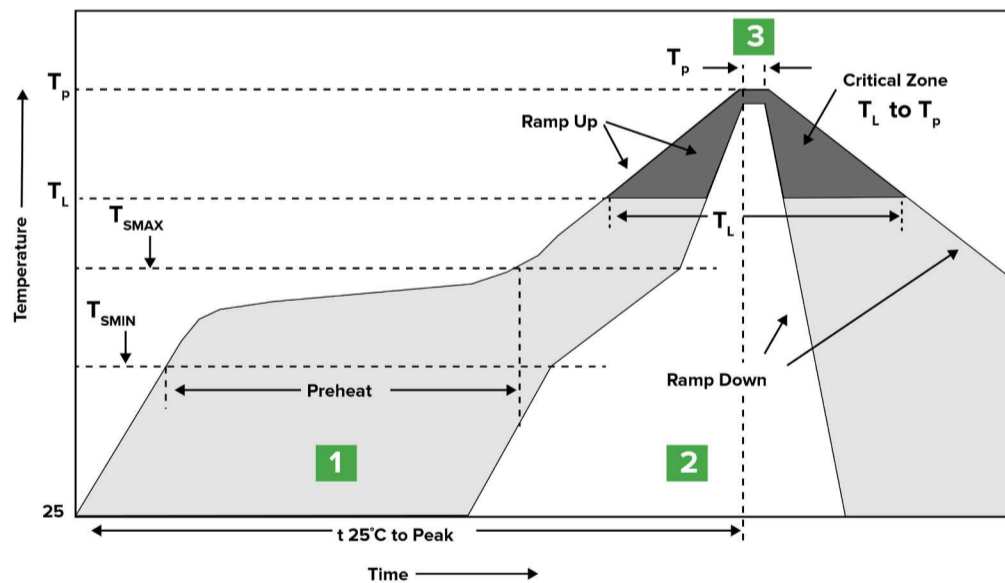


SERIES	L	W	T	A
0603	1.60 ± 0.15	0.8 ± 0.15	0.5 ± 0.05	0.3 ± 0.2
0805	2.0 (+0.3, -0.1)	1.25 ± 0.2	0.5 ± 0.1	0.5 ± 0.3

SERIES	A	B	C
0603	0.60~0.80	0.60~0.80	0.60~0.80
0805	0.80~1.20	0.80~1.20	0.90~1.60

Dimension: mm

## REFLOW



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	$T_L$ 217°C	60 ~ 90 sec.
3	Peak heat	$T_P$ 260°C	10 sec. MAX

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# LOW PROFILE MULTILAYER POWER INDUCTOR

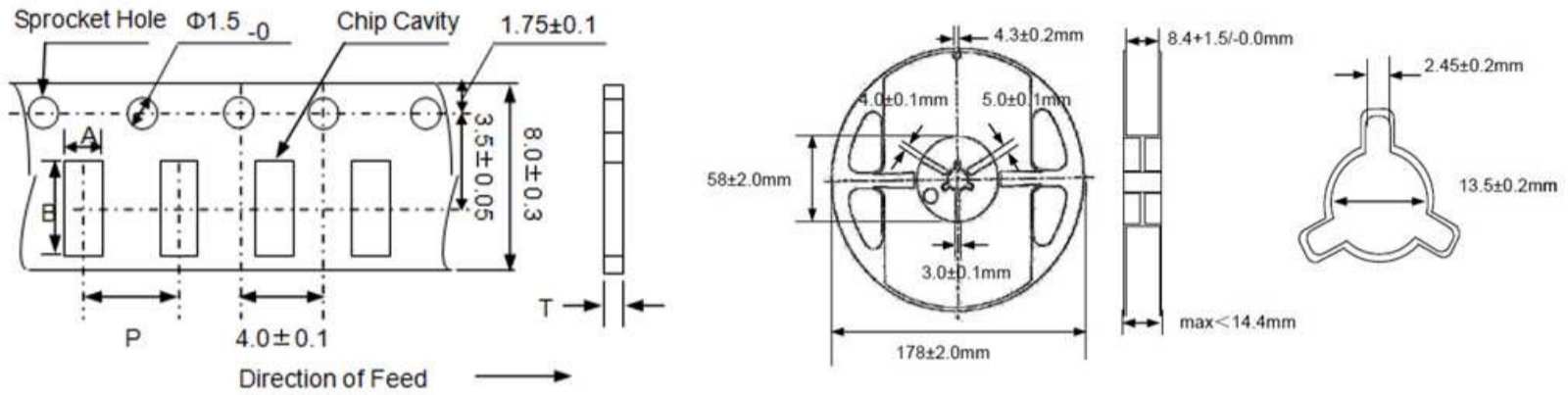


ASMPL

1.6 x 0.8 x 0.5 mm  
2.0 x 1.25 x 0.5 mm  
MSL = 1

RoHS/RoHS II Compliant

PACKING (TAPE & REEL: 5000 PCS/REEL)



SERIES	A	B	P	T (max)
0603	$1.0 \pm 0.2$	$1.8 \pm 0.2$	$4.0 \pm 0.1$	0.8
0805	$1.6 \pm 0.1$	$2.3 \pm 0.1$	$4.0 \pm 0.1$	0.8

Dimension: mm