



AS MPL-0603-R33M-T
ABRACON

Buy Now



Looking for a discount?

[Check out our current promotions!](#)

Give us a call

1-855-837-4225

International: 1-415-281-3866

Email Us

Sales and New Orders: sales@verical.com

Order Support: support@verical.com

Suppliers: [Visit our seller page](#)

Company Address

Arrow Electronics, Inc
9201 East Dry Creek Road
Centennial, CO 80112

This coversheet was created by Verical, a division of Arrow Electronics, Inc. ("Verical"). The attached document was created by the part supplier, not Verical, and is provided strictly 'as is.' Verical, its subsidiaries, affiliates, employees, and agents make no representations or warranties regarding the attached document and disclaim any liability for the consequences of relying on the information therein. All referenced brands, product names, service names, and trademarks are the property of their respective owners.

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**

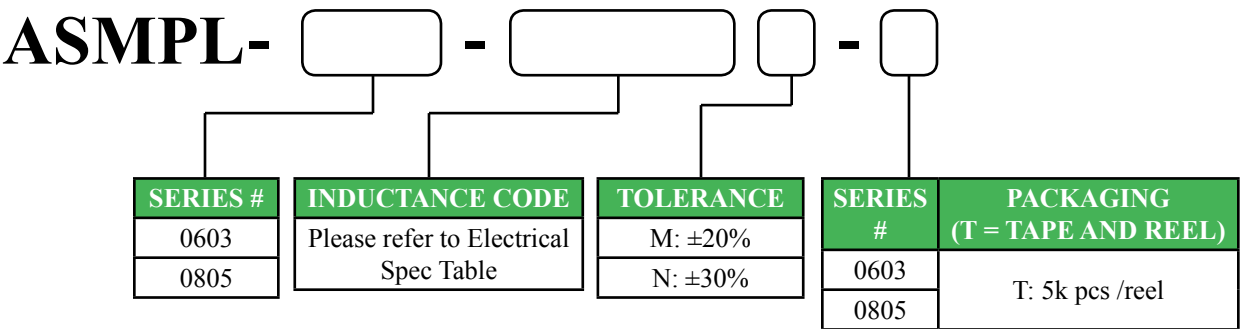
FEATURES

- 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

LOW PROFILE MULTILAYER POWER INDUCTOR

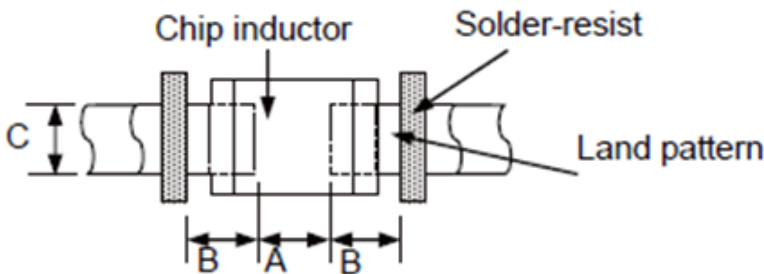
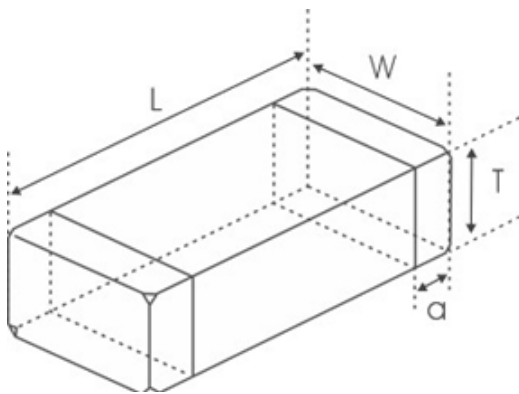


ASMPL

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

RoHS/RoHS II Compliant

MECHANICAL DIMENSIONS

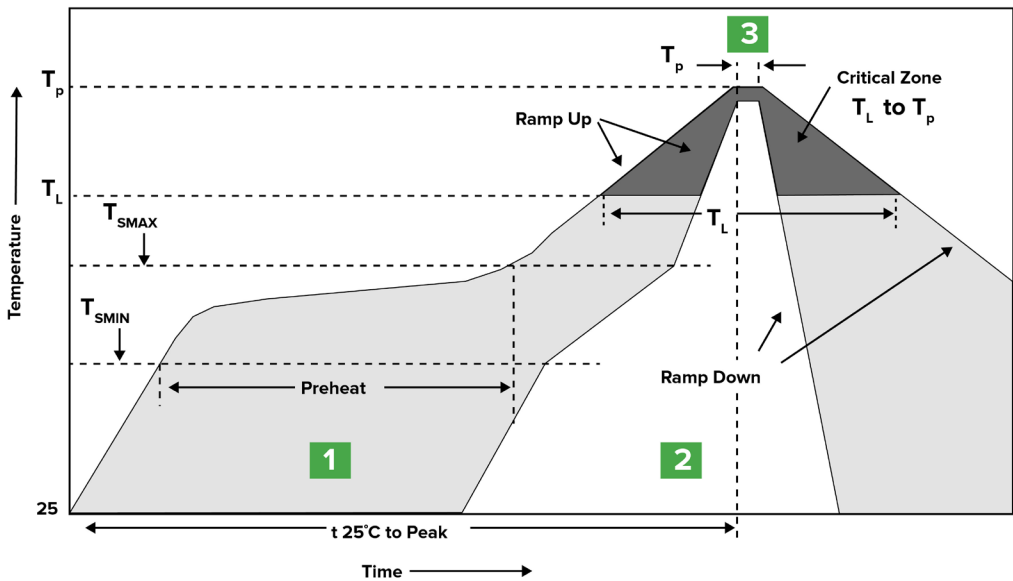


SERIES	L	W	T	A
0603	1.60 ± 0.15	0.8 ± 0.15	0.5 ± 0.05	0.3 ± 0.2
0805	2.0 (+0.3, -0.1)	1.25 ± 0.2	0.5 ± 0.1	0.5 ± 0.3

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

LOW PROFILE MULTILAYER POWER INDUCTOR

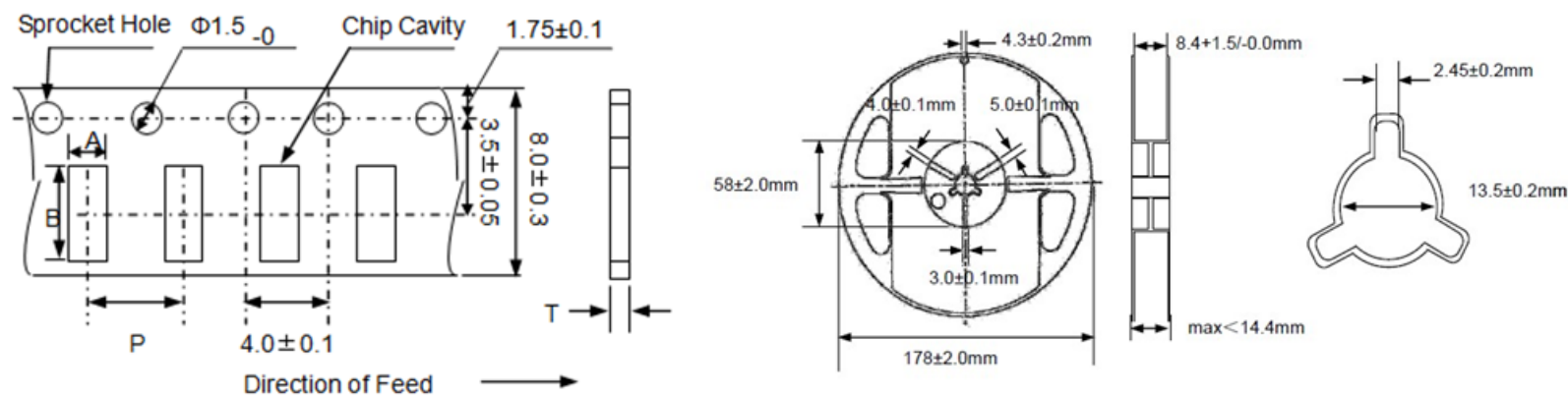


ASMPL

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±0.2	1.8±0.2	4.0±0.1	0.8
0805	1.6±0.1	2.3±0.1	4.0±0.1	0.8

Dimension: mm