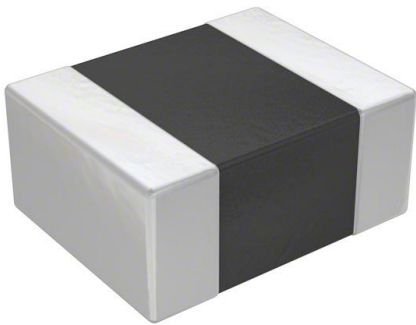


ASMPH-0806-2R2M-T Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	ASMPH-0806-2R2M-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	ASMPH-0806-2R2M-T
Description	FIXED IND 2.2UH 1.2A 110MOHM SMD
Detailed Description	2.2 μ H Shielded Multilayer Inductor 1.2 A 110mOhm 0806 (2016 Metric)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

ASMPH-0806-2R2M-T

Series:

ASMPH-0806

Type:

Multilayer

Inductance:

2.2 μ H

Current Rating (Amps):

1.2 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 MHz

Package / Case:

0806 (2016 Metric)

Size / Dimension:

0.079" L x 0.063" W (2.00mm x 1.60mm)

Manufacturer:

Abracon LLC

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

\pm 20%

Current - Saturation (Isat):

500mA

DC Resistance (DCR):

110mOhm

Frequency - Self Resonant:

50MHz

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

0806 (2016 Metric)

Height - Seated (Max):

0.039" (1.00mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



2.0 x 1.6 x 0.9mm

SMD Multilayer Chip Power Inductor

ASMPH-0806



RoHS/RoHS II Compliant

FEATURES:

- High DC bias current due to trench technology
- Much lower profile than any other series
- Monolithic structure for high reliability
- Excellent solderability and heat resistance
- Magnetically shielded structure to eliminate cross coupling

APPLICATIONS:

ASMPH family is a miniature type of multilayer power inductors constructed using low loss ferrite material to support high-speed switching frequencies. The compact size and high efficiency is ideal for DC/DC converter applications in space limited boards.

- Switching mode regulators for smart phones and cameras.
- Buck converters for RFIC, RFPA and Audio Codec modules.
- Boost converters for flash drivers.
- Wireless cards, DVD players and other electronic devices.

ELECTRICAL SPECIFICATIONS:

Operating Temperature: -40°C to +85°C

Storage Temperature: -10°C to +40°C, RH 70% (Max.)

Part Number ASMPH-0806- Inductance Code	Inductance	Tolerance	DCR	SRF Min.	Temperature Rise Current (max)	Saturation Current (Typ)
Units	μH	%	Ω ± 25%	MHz	mA	mA
Symbol	L	M=±20% N=±30%	DCR	SRF	I _{rms}	I _{sat}
ASMPH-0806-R47	0.47	M, N	0.08	100	1500	1600
ASMPH-0806-1R0	1.0	M, N	0.09	70	1400	1200
ASMPH-0806-1R5	1.5	M, N	0.11	60	1200	700
ASMPH-0806-2R2	2.2	M, N	0.11	50	1200	500
ASMPH-0806-3R3	3.3	M, N	0.12	40	1200	330
ASMPH-0806-4R7	4.7	M, N	0.14	30	1100	220

Unless otherwise specified, the standard atmospheric conditions for measurement/test as:

- Ambient Temperature: 20±15°C
- Relative Humidity: 65±20%
- Air Pressure: 86 kPa to 106 kPa

Inductance (L): HP4291B+HP16192A or Equivalent, tested at 1MHz, -20dBm or 50mV.

Direct Current Resistance (DCR): Milliohmeter-HP4338B or Equivalent

Self-Resonant Frequency (SRF): HP4291B+HP16192A or Equivalent, -20dBm or 50mV.

Temperature Rise current (I_{rms}): Electric Power, Electric current meter, Thermometer.

I_{rms} is the value of DC current as chip surface temperature rose just 40°C against chip initial surface temperature.

Saturation Current (I_{sat}): HP6632B system DC power supply, HP4291B+HP16192A+HP16200A or equivalent.

I_{sat} is the value of DC current as inductance decreased just 30% against initial value





2.0 x 1.6 x 0.9mm

SMD Multilayer Chip Power Inductor

ASMPH-0806



RoHS/RoHS II Compliant

PART IDENTIFICATIONS:

ASMPH-0806- - -

Inductance Code

Please refer to the table above

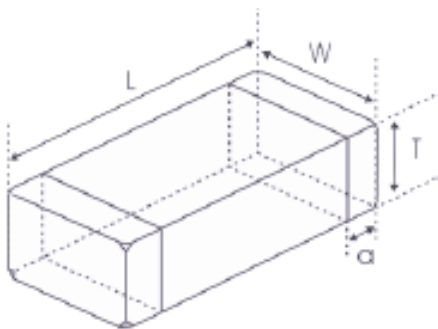
Tolerance

M=±20%
N=±30%

Packaging

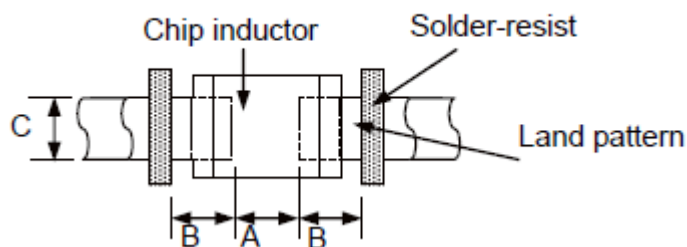
T: Tape and Reel (3kpcs / reel)

OUTLINE DRAWING:



L	W	T	a
2.0(+0.3,-0.1)	1.6±0.2	0.9±0.1	0.5±0.3

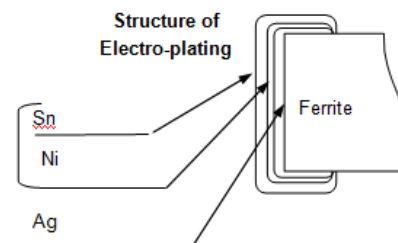
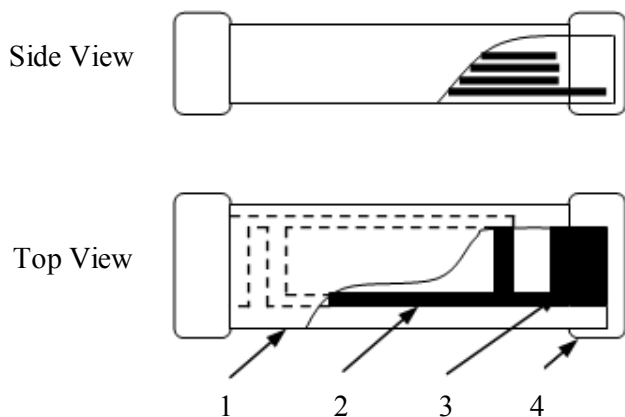
Recommended Land Pattern



A	B	C
0.8~1.2	0.8~1.2	1.2~2.0

Dimension: mm

MATERIALS:



	Part Name	Material
1	Base Material	Ferrite
2	Internal Conductor	Ag
3	Pull out Electrode	Ag
4	Terminal Electrode	Ag (Inner layer) Ni-Sn (Outer layer)

SMD Multilayer Chip Power Inductor

ASMPH-0806-2R2M-T Abracon LLC FIXED IND 2.2UH 1.2A 110MOHM SMD



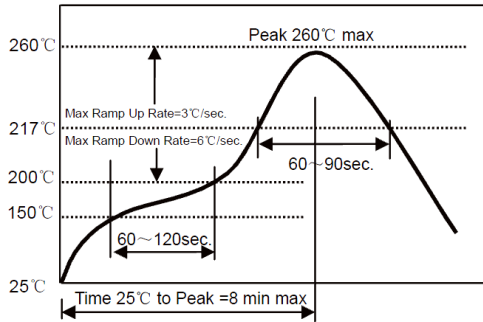
2.0 x 1.6 x 0.9mm

ASMPH-0806



RoHS/RoHS II Compliant

REFLOW PROFILE:

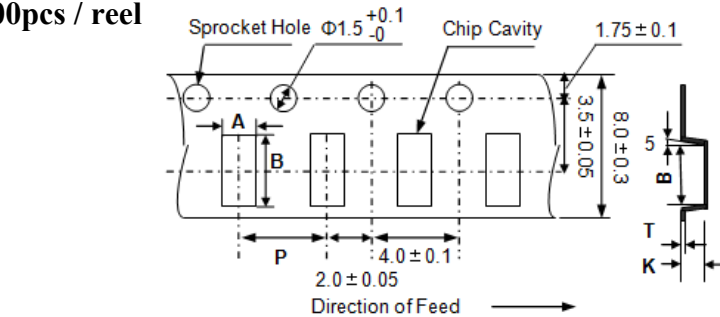


Preheat Condition	150 to 200 °C; 60 to 120 sec.
Allowed time above 217 °C	60 to 90 sec.
Max temperature	260 °C
Max time at max temperature	10 sec.
Solder paste	Sn/3.0Ag/0.5Cu
Allowed Reflow time	2x max.

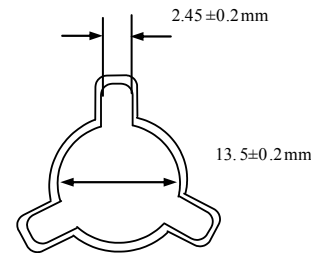
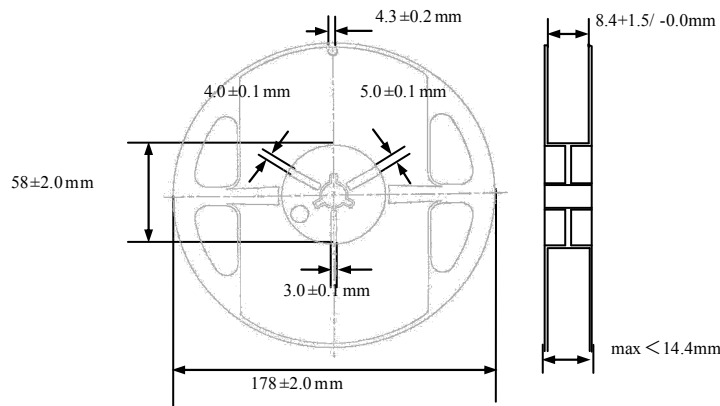
TAPE & REEL:

Packing

T: 3,000pcs / reel



A	B	P	K max	T max
1.90±0.1	2.30±0.1	4.0±0.1	1.45	0.3



Dimension: mm

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