Molded SMD Power Inductor



ASPIAIG-Q7030

Request Samples | Check Inventory

7.8 x 7.6 x 2.9 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- PPAP ready and supported
- TS16949 certified production lines
- AEC-Q200 Grade 0 qualified (-55˚C ~ +155˚C)
- Shielded construction
- Soft saturation
- Low DCR, High Efficiency

Applications

- Body electronics and comfort system
- Infotainment and entertainment
- Electric vehicles
- Lighting
- Solar inverters and power
- Industrial and robotics
- Medium and high power switch mode power supplies.

Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance	Saturation Current	Temperature Rise Current	
	0.1MHz/0.1V		Typ/Max	Max	Max	D
Units	µH	%	mΩ	A	A	mm
Symbol	L	M	DCR	Isat	Irms	±0.3
ASPIAIG-Q7030-R60	0.60	M	2.90 / 3.20	32.0	23.0	6.6
ASPIAIG-Q7030-1R0	1.00	M	4.55 / 5.00	28.0	21.8	6.6
ASPIAIG-Q7030-1R5	1.50	M	7.50 / 8.25	23.5	15.3	6.6
ASPIAIG-Q7030-2R2	2.20	M	12.4 / 13.7	17.0	13.0	6.2
ASPIAIG-Q7030-2R7	2.70	M	14.0 / 15.4	13.5	11.4	6.2
ASPIAIG-Q7030-3R3	3.30	M	16.3 / 18.0	13.0	10.0	6.2
ASPIAIG-Q7030-4R7	4.70	M	24.2 / 26.7	12.2	9.00	6.2
ASPIAIG-Q7030-5R6	5.60	M	30.1 / 33.2	11.5	7.30	6.2
ASPIAIG-Q7030-6R8	6.80	M	38.6 / 42.5	11.0	6.80	6.2
ASPIAIG-Q7030-8R2	8.20	M	44.3 / 48.7	9.0	5.90	6.2

Test Conditions

Isat: DC current at which the inductance drops 20% from its value.
Irms: DC current that causes the temperature rise (ΔT, approximate 40 ˚C) from 20°C ambient

Operating Temperature: -55˚C ~ +155˚C (including self-temperature rise)
Storage Condition: -55˚C ~ +155˚C and R.H. 60 max
Operating Voltage: 40V (across inductor)
ASPIAIG-Q7030 Series is RoHS Compliant and Pb free
ASPIAIG-Q7030 is AEC-Q200 Grade 0 qualified (-55˚C ~ +155˚C)
MSL level: 1

ABRACON

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

REVISED: 09-28-20

ABRACON IS ISO9001-2015 CERTIFIED

Downloaded from Arrow.com.

Molded SMD Power Inductor



ASPIAIG-Q7030

Request Samples | Check Inventory

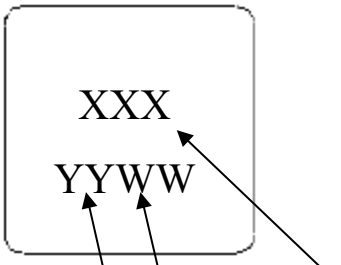
7.8 x 7.6 x 2.9 mm
RoHS/RoHS II Compliant
MSL Level = 1

Part Identification

ASPIAIG- Q7030 - ☐☐ - ☐

Inductance Code	Tolerance	Packaging
See Electrical Specification table	M = ± 20%	T: Tape and Reel (1.5kpcs / reel)

Marking



Inductance Code

e.g. 1R0

W: Week: E.g. 05 for the 5th week of the year.

Y: Year: E.g. 20 for 2020

Marking Method: Ink

ABRACON

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

REVISED: 09-28-20

ABRACON IS ISO9001-2015 CERTIFIED

Downloaded from Arrow.com.

Molded SMD Power Inductor

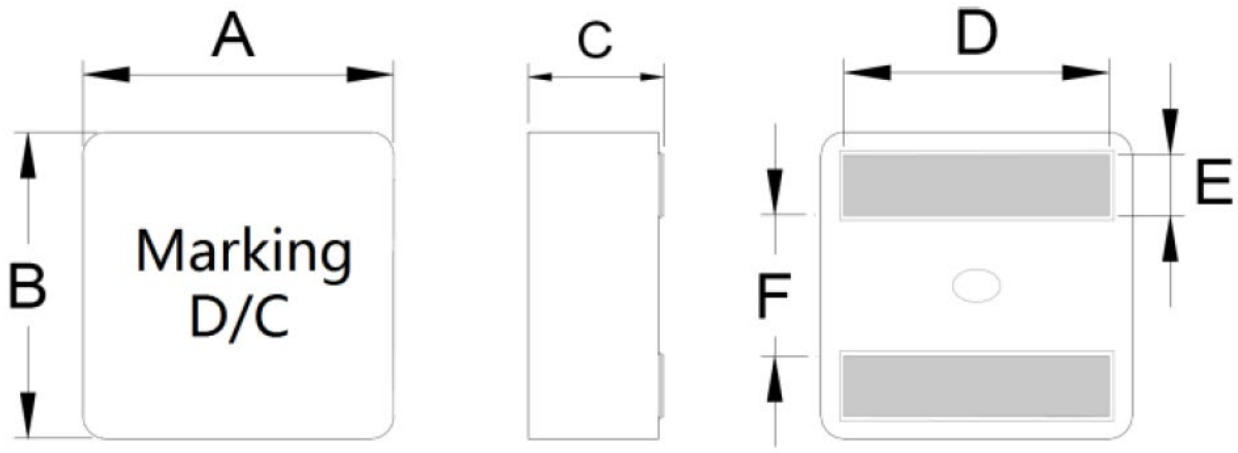


ASPIAIG-Q7030

Request Samples | Check Inventory

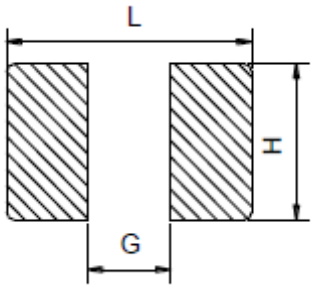
7.8 x 7.6 x 2.9 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Dimensions



Series	A	B	C	D	E	F
ASPIAIG-Q7030	7.8 ± 0.2	7.6 ± 0.2	2.9 ± 0.2	See column D in Spec Table	1.75 ± 0.2	3.15 ± 0.25

Recommended Land Pattern



L	G	H
7.4 Ref.	2.8 Ref.	7.2 Ref.

Dimension: mm

ABRACON

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

REVISED: 09-28-20

ABRACON IS ISO9001-2015 CERTIFIED

Downloaded from Arrow.com.

Molded SMD Power Inductor

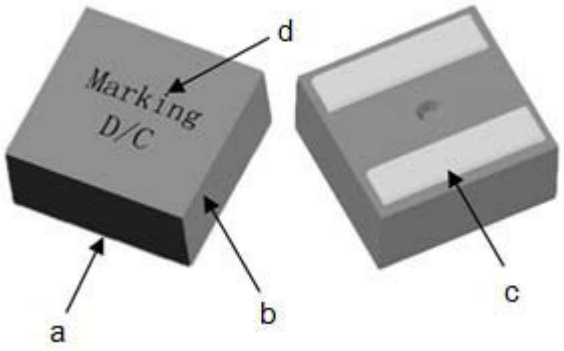


ASPIAIG-Q7030

Request Samples | Check Inventory

7.8 x 7.6 x 2.9 mm
RoHS/RoHS II Compliant
MSL Level = 1

Materials



	Components	Material
a	**Core**	**Alloy powder**
b	**Wire**	**220 deg. C Flat Wire**
c	**Solder**	**100% Pb free solder**
d	**Ink**	**Halogen-free ketone**

ABRACON

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

REVISED: 09-28-20

ABRACON IS
ISO9001-2015
CERTIFIED

Downloaded from Arrow.com.

Molded SMD Power Inductor

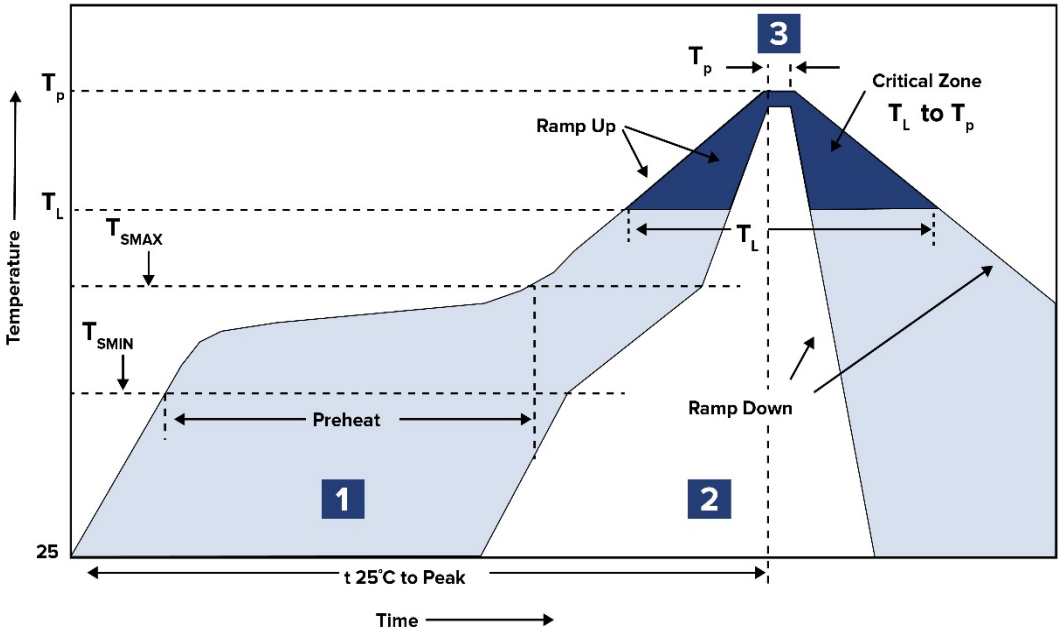


ASPIAIG-Q7030

Request Samples | Check Inventory

7.8 x 7.6 x 2.9 mm
RoHS/RoHS II Compliant
MSL Level = 1

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C±5°C	10 sec. MAX

ABRACON

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

REVISED: 09-28-20

ABRACON IS ISO9001-2015 CERTIFIED

Downloaded from Arrow.com.

Molded SMD Power Inductor



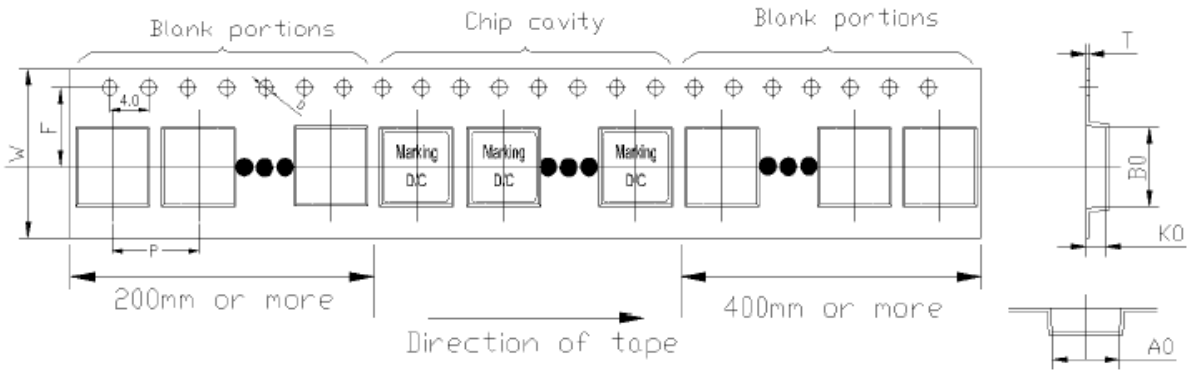
ASPIAIG-Q7030

Request Samples | Check Inventory

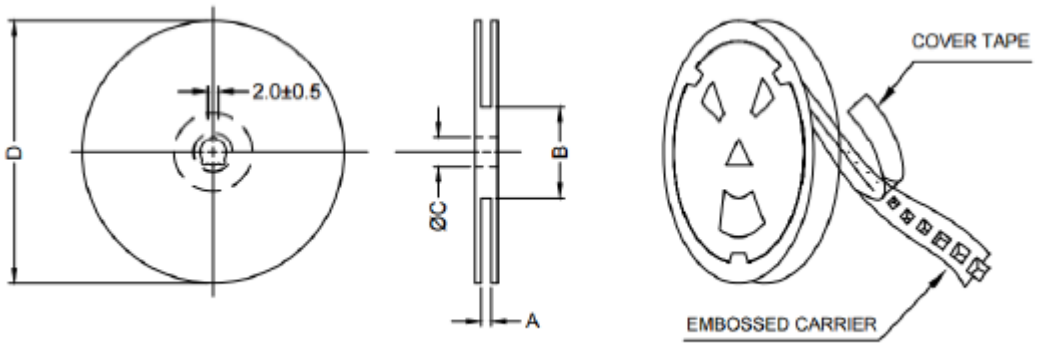
7.8 x 7.6 x 2.9 mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 1500 pcs/reel)



W	F	P	D	A_0	B_0	T	K_0
16.0±0.3	7.5±0.1	12.0±0.1	1.5±0.1	8.2±0.1	8.0 ±0.1	0.35±0.05	3.3±0.1



A	B	C	D
16.4+2/-0	100 ± 2	13.0+0.5/-0.2	330

Dimension: 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.

ABRACON

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

REVISED: 09-28-20

ABRACON IS ISO9001-2015 CERTIFIED

Downloaded from Arrow.com.