

VERTICALLY ASSEMBLED POWER INDUCTOR



AVR-1Z070711S

Request Samples



Check Inventory



6.7 x 6.6 x 10.7mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Ferrite Core
- Low DCR, High Efficiency
- High temperature current rating
- High saturation current rating

Applications

- Single and Multiphase DC-DC converters
- Voltage regulator modules (VRMs)
- Renewable energy, Power inverters, DC links
- Electric Vehicles (EVs)
- Telecom infrastructure, datacenters, servers and switches
- Industrial and robotics equipment
- Medium and high-power switch mode power supplies (SMPS)

Electrical Specifications @ 25°C

Part Number*	Inductance 100KHz/1.0V	Inductance Tolerance	Full Load Inductance	Dim. B	DC Resistance mΩ	Saturation Current		Temperature Rise Current A	
						Min.	±0.3		
Units	nH	%	nH	mm		A	A		
Symbol	L	K, L	FLL	B	DCR 0.145±10%	Isat1@ 25°C	Isat2@ 100°C	76	
AVR-1Z070711S55NLT	55	15	42	6.6		155	130		
AVR-1Z070711S70NKT	70	10	49			134	114		
AVR-1Z070711SR10KT	100		70	6.4		93	79		
AVR-1Z070711SR12KT	120		84			76	65		
AVR-1Z070711SR15KT	150		105			60	51		
AVR-1Z070711SR22KT	220		154			42	35		
AVR-1Z070711SR33KT	330		231			28	22		

* The “T” at the end of the part number refers to “Tape & Reel” packaging. For other options, please refer to the Part Identification section.

Test Conditions:

Isat1: DC current at which the inductance drops to FLL at 25°C.

Isat2: DC current at which the inductance drops to FLL at 100°C.

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 25°C ambient.

Dim. B: Refer to the Mechanical Specs section.

DC Resistance: Nominal DCR measured from point ‘a’ to ‘b’. (refer to the Mechanical specs section)

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

Storage Condition: -40°C ~ +125°C (on board), -10°C ~ +40°C (with packaging) and R.H. 70 max.

AVR-1Z070711S Series is RoHS Compliant and Pb free.

VERTICALLY ASSEMBLED POWER INDUCTOR



AVR-1Z070711S

Request Samples



Check Inventory



6.7 x 6.6 x 10.7mm
RoHS/RoHS II Compliant
MSL Level = 1

Part Identification

AVR-1Z070711S

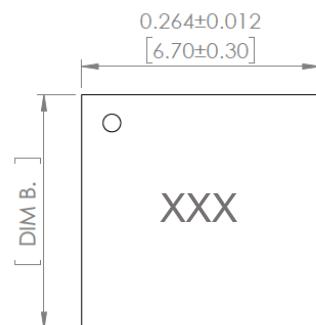
Inductance Code
See Electrical Specification table
e.g. R10

Tolerance*
K = $\pm 10\%$
L = $\pm 15\%$

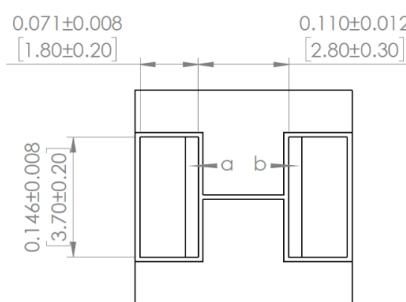
Packaging options
T: Tape and Reel (See Packaging)
B: Bulk

*Tolerance only available as indicated in electrical spec. table

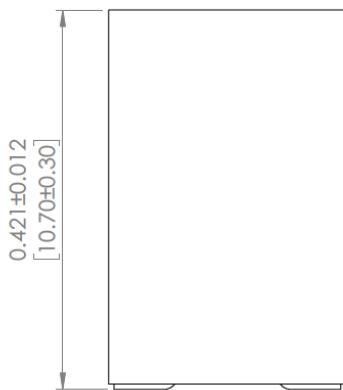
Mechanical Specifications



TOP VIEW

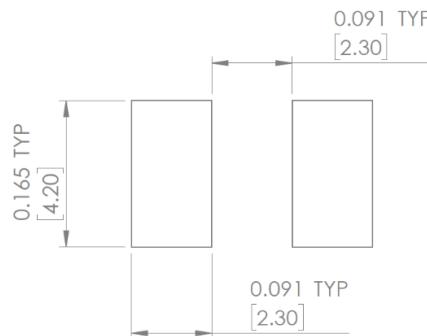


BOTTOM VIEW



FRONT VIEW

RECOMMENDED LAND PATTERN



Refer to the Specification table for Dim B.

'a' and **'b'**: DCR measuring points.

Markings: Inductance code.

Dimensions: Inches [mm]

VERTICALLY ASSEMBLED POWER INDUCTOR



AVR-1Z070711S

Request Samples



Check Inventory

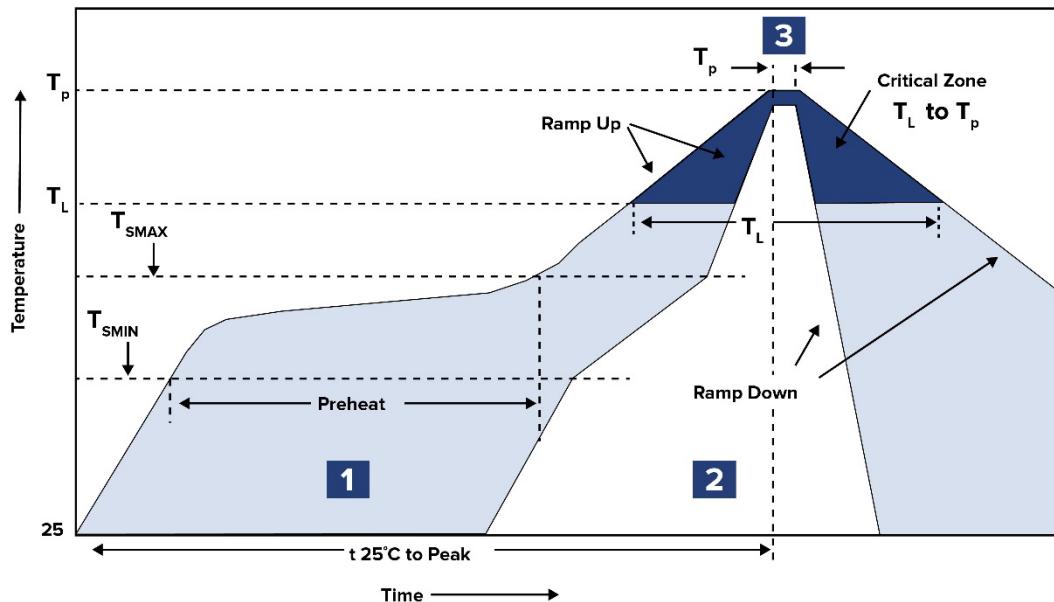


6.7 x 6.6 x 10.7mm

RoHS/RoHS II Compliant

MSL Level = 1

Reflow Profile



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 ~ 150 sec.
3	Peak heat	T_p 260°C Max	5 Sec. Max

Ref. Solder paste: Sn/3.0Ag/0.5Cu

Time from 25°C to peak: 8 Mins

Ramp up rate: 3°C/s Max.

Ramp down rate: 6°C/s Max.

VERTICALLY ASSEMBLED POWER INDUCTOR



AVR-1Z070711S

Request Samples



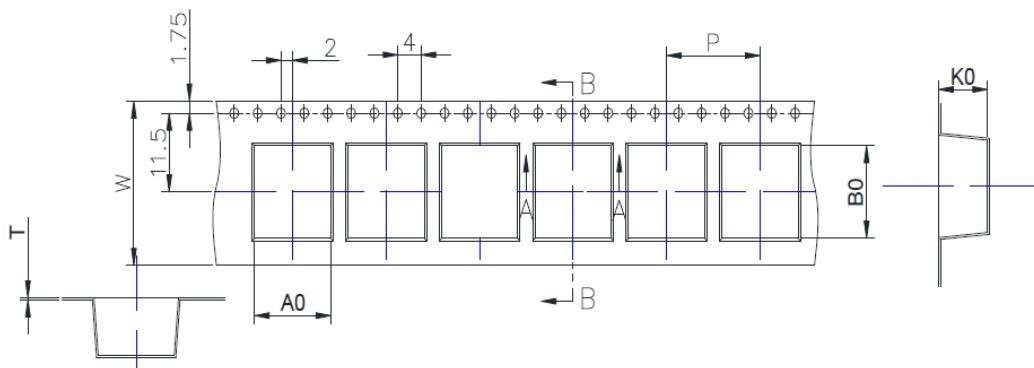
Check Inventory



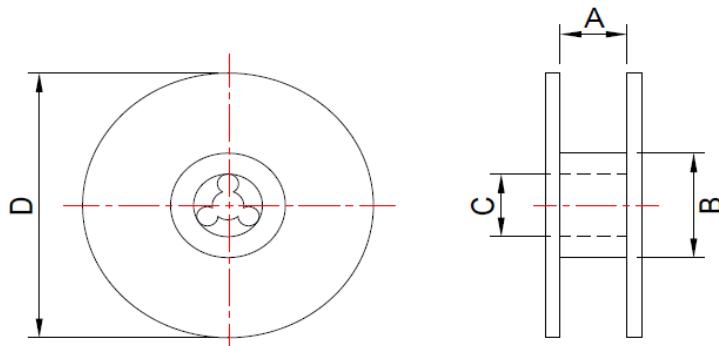
6.7 x 6.6 x 10.7mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 300 pcs/reel



Ao	Bo	Ko	P	T	W
7.1 ± 0.10	7.2 ± 0.10	11.2 ± 0.15	16.0 ± 0.10	0.5 ± 0.05	24.0 ± 0.30



A	B	C	D
24.5 ± 0.2	100 ± 2.0	13.0 ± 0.2	330 Ref.

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

REVISION Initial Release :
6/10/2024

ABRACON IS
ISO9001-2015
CERTIFIED

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ABRACON:](#)

[AVR-1Z070711S55NLT](#) [AVR-1Z070711SR33KT](#) [AVR-1Z070711SR10KT](#) [AVR-1Z070711S70NKT](#) [AVR-1Z070711SR15KT](#) [AVR-1Z070711SR12KT](#) [AVR-1Z070711SR22KT](#)