

# High Q Ceramic Wirewound RF Inductor (AEC-Q200)



AISC-Q1008HQ Series

Request Samples



Check Inventory



2.92 x 2.79 x 2.03 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Features

- PPAP ready and supported
- TS16949 certified production lines
- AEC-Q200 (grade 1) qualified
- Ceramic base with high SRF
- Excellent DCR and current carrying characteristics.
- Ultra-compact inductors
- Tight tolerance down to  $\pm 2\%$

## Applications

- Automotive applications
- Bluetooth, W-LAN, Broadband Network
- Impedance matching networks
- Filtering for high frequency communication circuits
- Video cameras, displays, and other electronic devices.

## Electrical Specifications

Part Number Inductance Code	L (nH)	Tolerance	Q	Q Test	SRF	DCR	IDC
			Min	Freq (MHz)	Min (GHz)	Max ( $\Omega$ )	Max (mA)
3N0	3.0	J, K	70	1500	6.00	0.04	1600
3N9	3.9	J, K	75	1500	6.00	0.05	1600
4N1	4.1	J, K	75	1500	6.00	0.05	1600
7N8	7.8	J, K	75	500	3.80	0.05	1600
10N	10	G, J, K	60	500	3.60	0.06	1600
12N	12	G, J, K	70	500	2.80	0.06	1500
18N	18	G, J, K	62	350	2.70	0.07	1400
22N	22	G, J, K	62	350	2.05	0.07	1400
33N	33	G, J, K	75	350	1.70	0.09	1300
39N	39	G, J, K	75	350	1.30	0.09	1300
47N	47	G, J, K	75	350	1.45	0.12	1200
56N	56	G, J, K	75	350	1.23	0.12	1200
68N	68	G, J, K	80	350	1.15	0.13	1100
82N	82	G, J, K	80	350	1.06	0.16	1100
R10	100	G, J, K	50	350	0.82	0.16	1000
R12	120	G, J, K	50	100	0.82	0.16	1000

### Test Conditions:

Inductance, Q, SRF: HP4286/E4982A

DCR: Micro-Ohm meter (Gom-801G)/E4982A

IDC: Applied the current to coils, the temperature of coil increases  $\Delta T 15^{\circ}\text{C}$  ( $T_a = 25^{\circ}\text{C}$ ).

**Operating Temperature:**  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

**Components Storage Temperature:**  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

**Tape and Reel packaging Temperature:**  $15\sim 28^{\circ}\text{C}$ ;  $< 80\%$  RH

**AISC-Q1008HQ is AEC-Q200 Qualified**

**AISC-Q1008HQ Series is RoHS Compliant and Pb free.**



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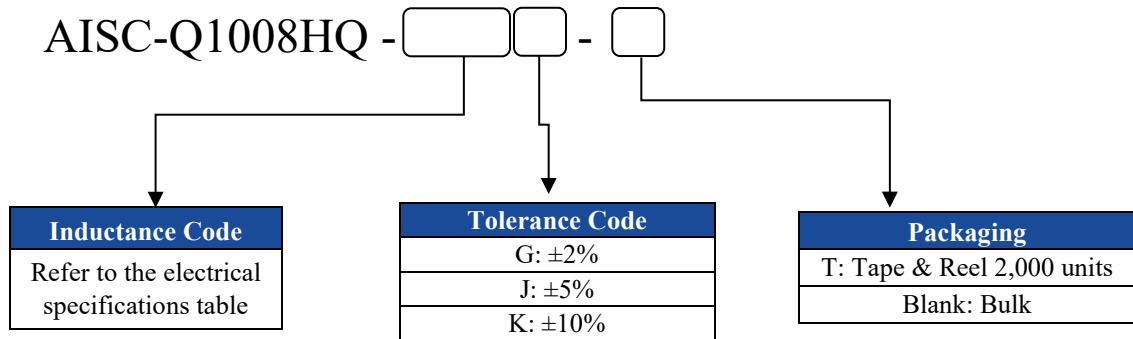


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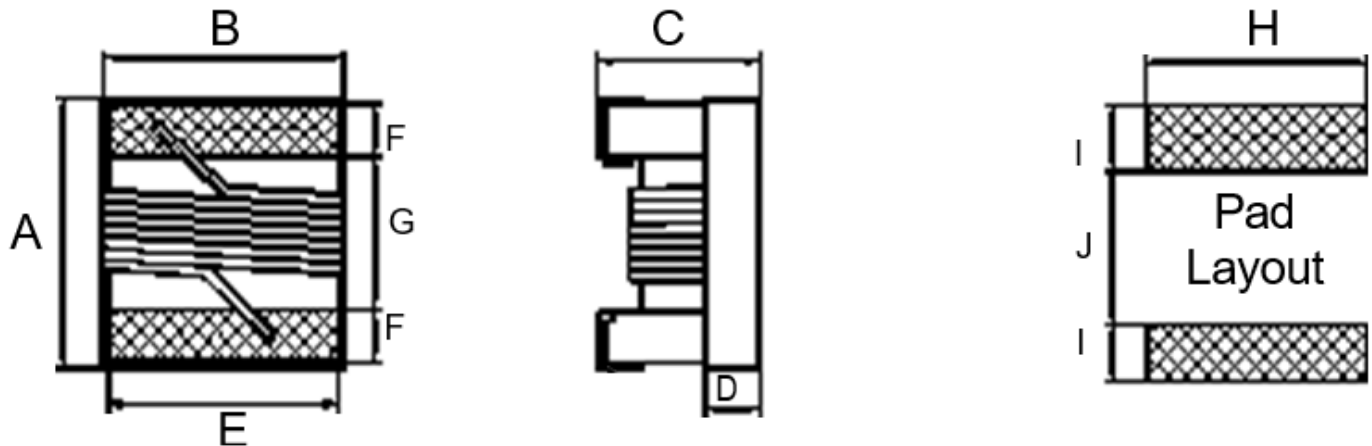


2.92 x 2.79 x 2.03 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Part Number Identification



## Mechanical Dimensions



A	B	C	D	E	F	G	H	I	J
2.92	2.79	2.03	0.65	2.03	0.51	1.52	2.54	1.02	1.27

Dimensions: mm

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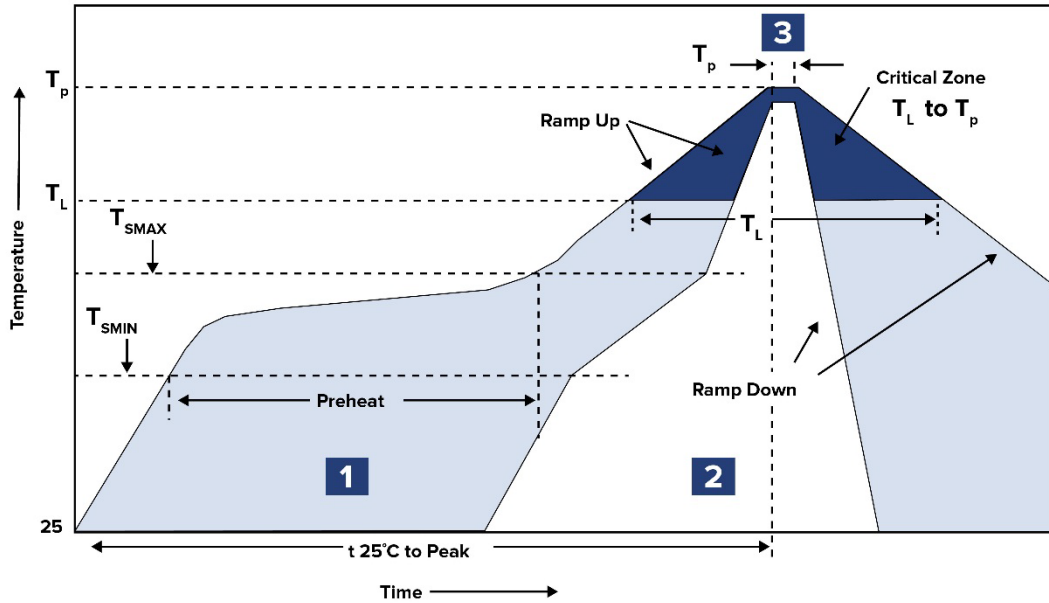


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## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	90 ~ 120 sec.
2	Reflow	$T_L$ 220°C	40 ~ 60 sec.
3	Peak heat	$T_P$ 260°C±5°C	10 sec. MAX

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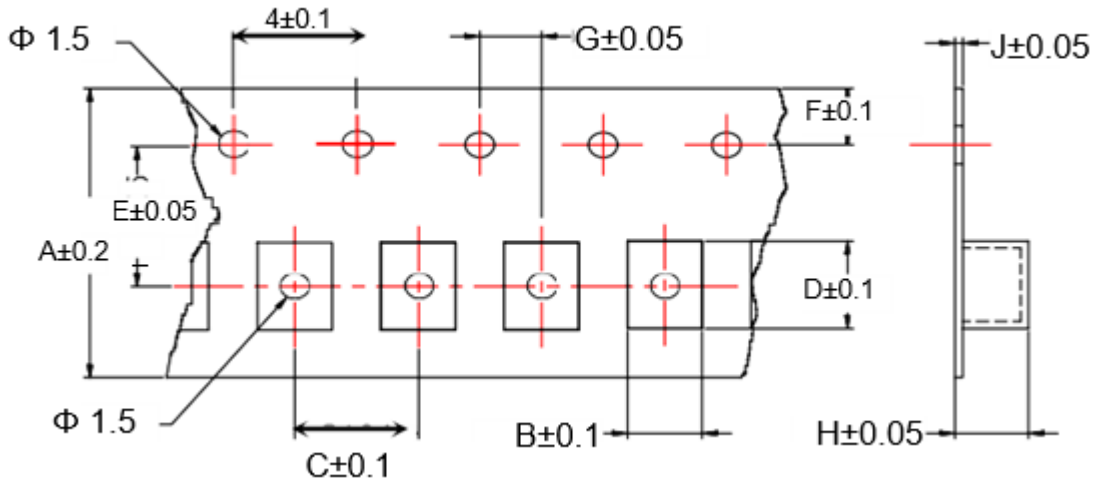
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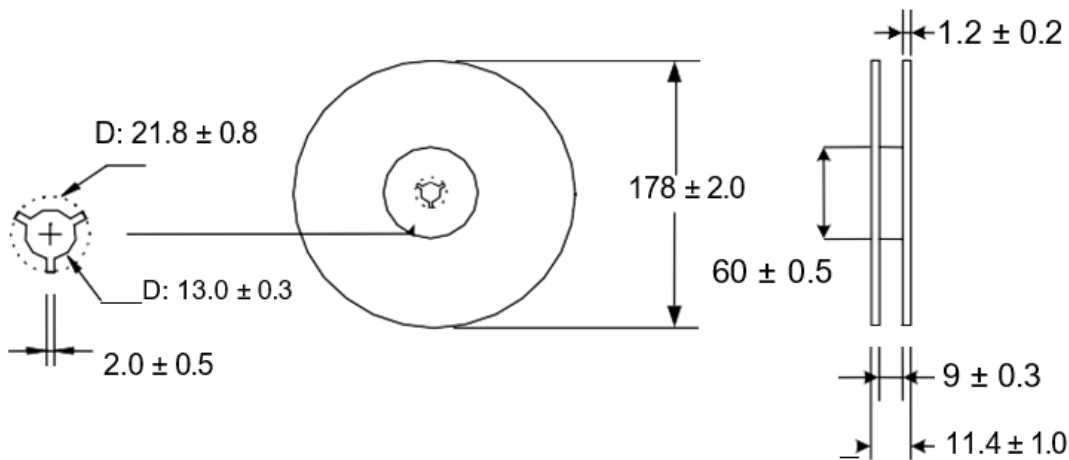
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## Packaging

T: Tape & Reel: 2,000 pcs/reel



A	B	C	D	E	F	G	H	J
8.0	2.70	4.0	2.80	3.5	1.75	2.0	2.00	0.23



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.



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