

HCD POWER INDUCTORS :HCD0603-R-100JL

Applications:

Various high power inductors are superior to be high saturation for surface mounting.
Application for power supply for Bluetooth, OA equipment, notebook PC, portable communication equipments, DC/DC converters, High Frequency circuit. etc.

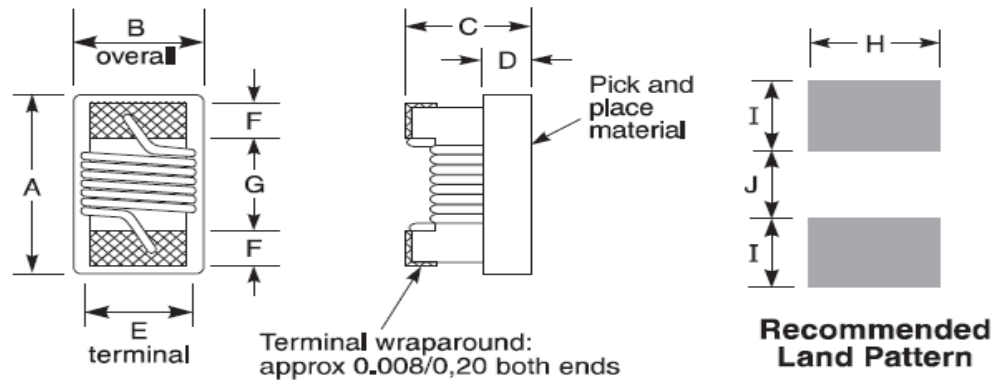
Part number

HCD 0603 - R - 100 J L
1 2 3 4 5

(1) Size Code	0603
(2) Packing	R=Tapping with reel
(3) Inductance uH	100=10uH
(4) Tolerance	J=±5% K=±10% M=±20%
(5) Code	L



Dimension and Terminal Configuration



Type	A max (mm)	B max (mm)	C max (mm)	D ref (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)
0603	1.8	1.32	1.12	0.38	0.76	0.33	0.86	1.02	0.64	0.64

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Electrical Specification

Part number	Inductance (uH)	Percent Tolerance	Qtyp(min)	SRF min (MHz)	DCR max (Ohms)	Irms (A)
HCD0603-R-100JL	10 @ 2.5MHz	5	12 @ 2.5MHz	25	4.8	0.18

Inductance measured at 0.1 Vrms, using HEK SMD-A fixture in Agilent/HP 4286A impedance analyzer with HEK provided correlation pieces.

Q measured on Agilent/HP 4395A with Agilent/HP 16193 test fixture.

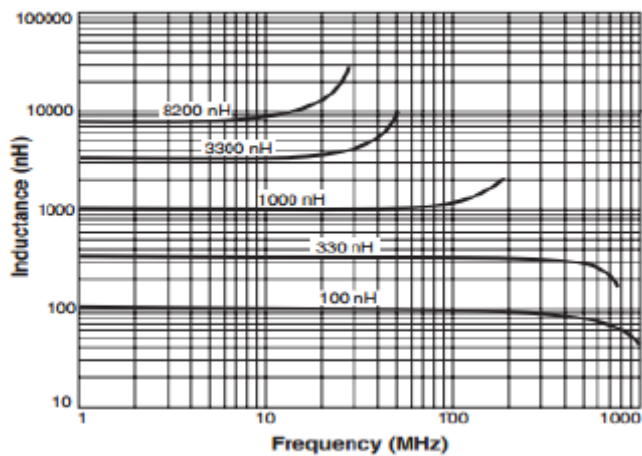
DCR measured using Agilent/HP 8753D network analyzer with HEK SMD-D test fixture.

Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate.

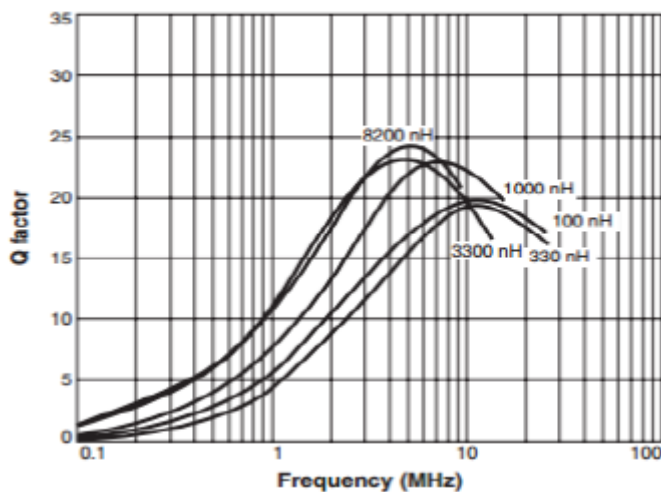
Electrical specifications at 25°C

Electrical Characteristics

Typical L vs Frequency



Typical Q vs Frequency

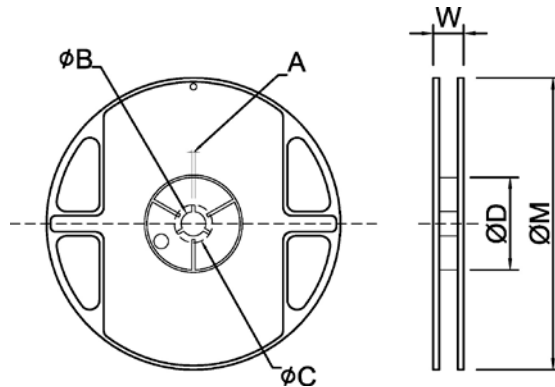


Taping Specifications

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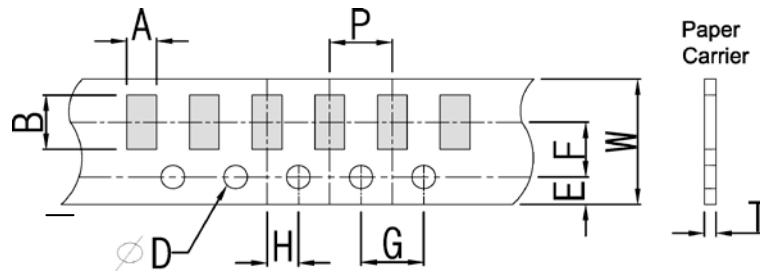
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕ B	ϕ C	ϕ D	W	ϕ M
	7"	3K/Reel	2.0±0.5	13.5±1.0	21±1.0	60±1.0	11.5±2.0	178±2.0

Tapping Specification

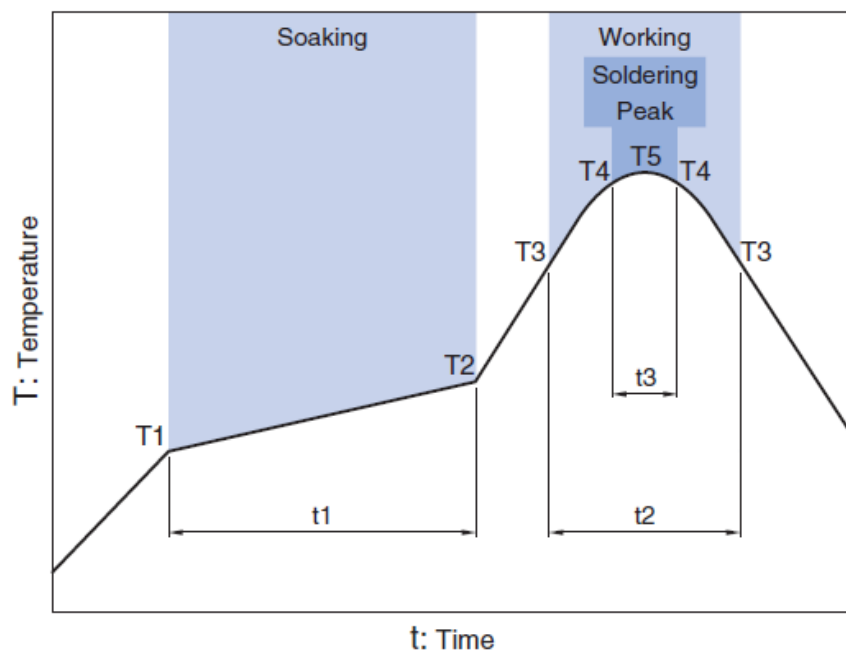


Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
	0603	1.7 ± 0.20	2.3 ± 0.20	8.0 ± 0.20	1.75 ± 0.10	3.0 ± 0.05	4.0 ± 0.10	2.0 ± 0.05	0.75 ± 0.10	$1.50^{+0.10}_{-0}$	4.0 ± 0.1

Recommended Reflow Profile

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Pb free solder



Soaking			Working		Soldering		Peak
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120sec	230°C	more than 30sec	247 to 253°C	within 10sec	260°C Max.

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