

Power Inductor 125°C CDRH Series



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■ Features

- ◎ Magnetically shielded construction.
- ◎ Storage temperature range: -40°C~+125°C.
- ◎ Operating temperature range: -40°C~+125°C (including coil's self-heat).
- ◎ RoHS Compliance and Halogen Free.
- ◎ Qualification to AEC-Q200.

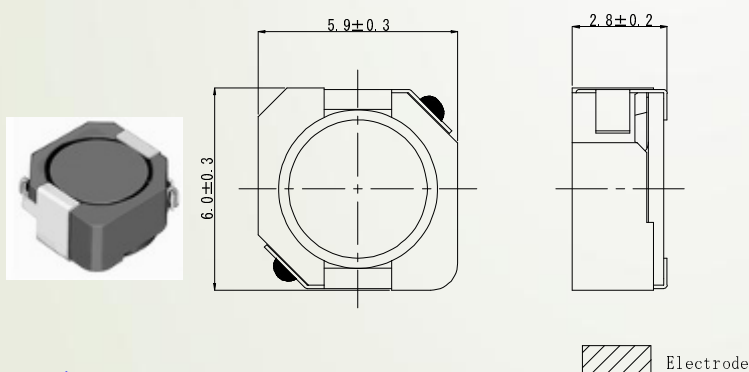
■ Applications

Ideally used in air bag, car audio and navigation of automotive.

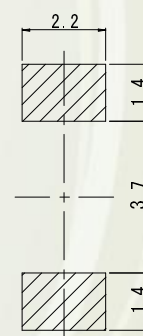
■ Shapes and Dimensions/Recommended Land Patterns(mm)

◆ CDRH5D28R/H125

◆ Dimensions

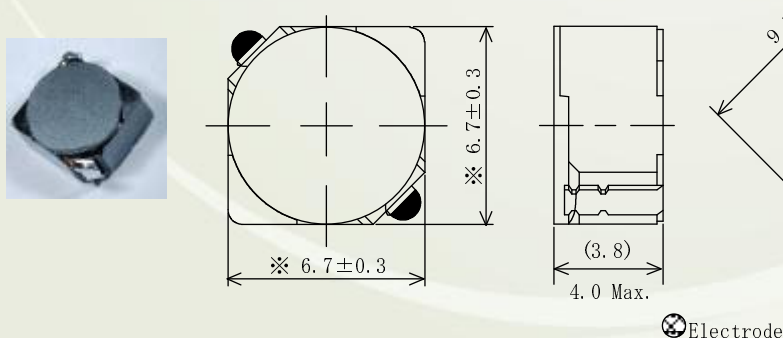


◆ Land pattern

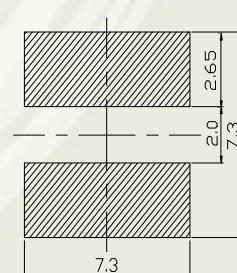


◆ CDRH6D38/T125

◆ Dimensions



◆ Land pattern



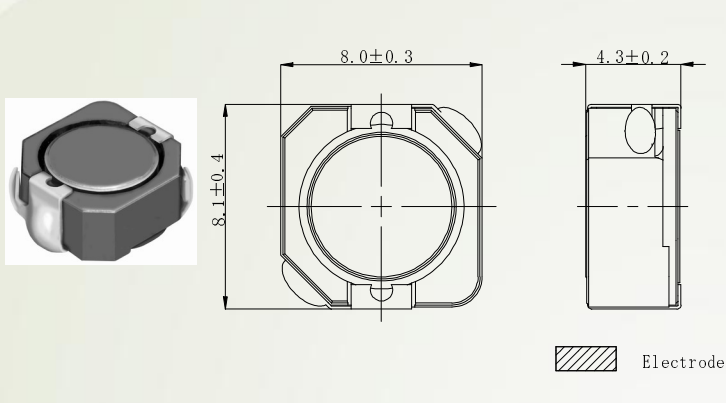
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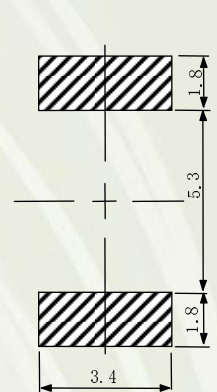
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◆ CDRH8D43R/T125

◆ Dimensions

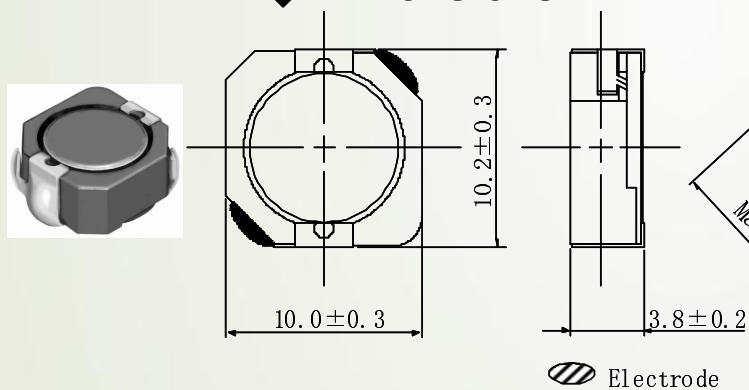


◆ Land pattern

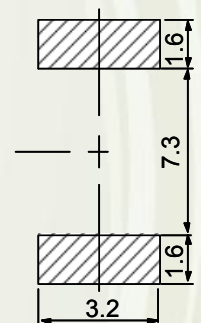


◆ CDRH104R/T125

◆ Dimensions

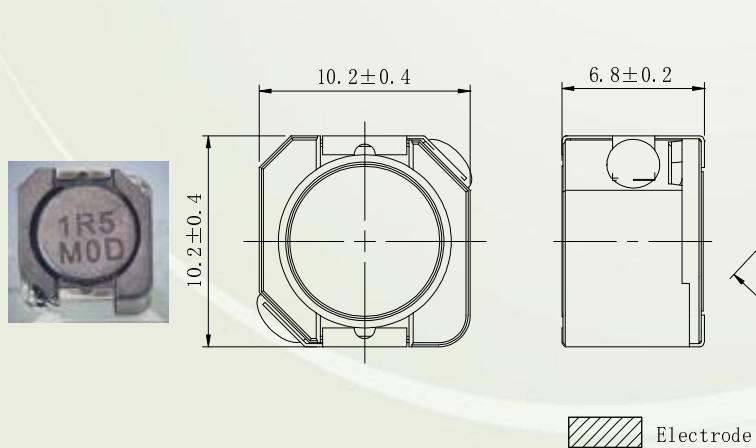


◆ Land pattern

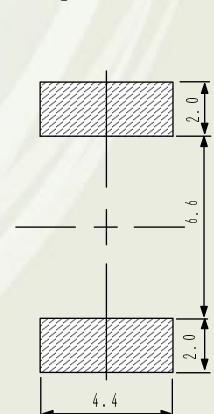


◆ CDRH10D68R/T125

◆ Dimensions



◆ Land pattern



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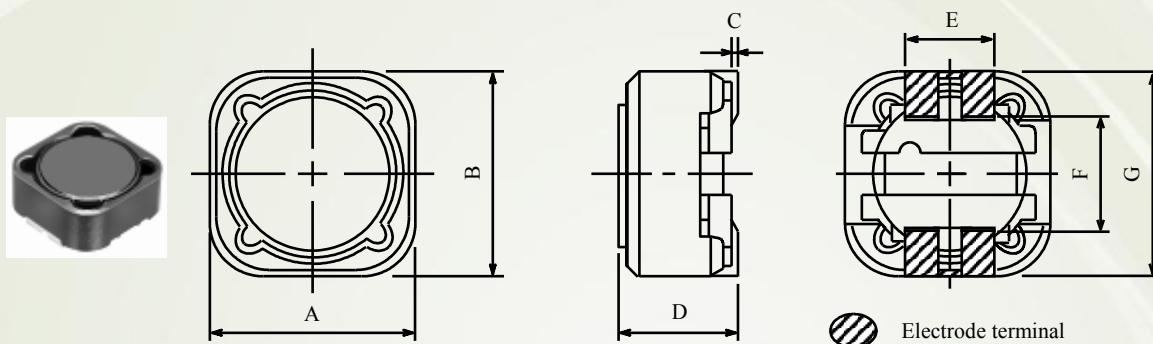
125°C CDRH Series



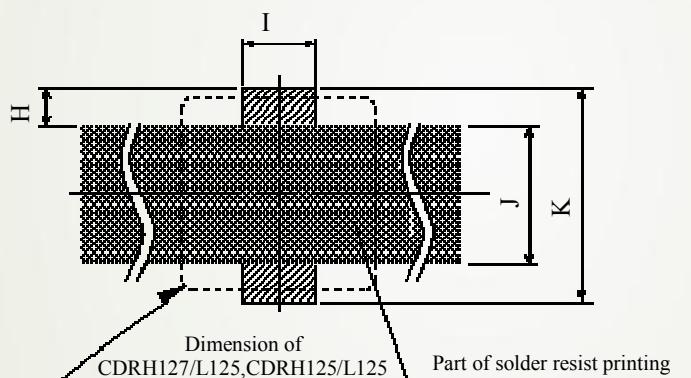
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◆ CDRH125/L125, CDRH127/L125

◆ Dimensions



◆ Land pattern



Type No.	A	B	C	D	E	F	G	H	I	J	K
CDRH125/L125	12.0±0.3	12.0±0.3	0.2	6.0Max.	5.0	7.6	12.0	2.9	5.4	7.0	12.8
CDRH127/L125	12.0±0.3	12.0±0.3	0.2	8.0Max.	5.0	7.6	12.0	2.9	5.4	7.0	12.8

Power Inductor

125°C CDRH Series



■Electrical Characteristics specification.

◆ CDRH5D28R/H125

Part Name	Stamp	Inductance (μ H) ※1	D.C.R.(m Ω) Max.(Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 125°C	
CDRH5D28RH125NP-1R0PC	1R0	1.0 $\pm$ 25%	17.0(13.5)	7.10	5.60	4.10
CDRH5D28RH125NP-1R5PC	1R5	1.5 $\pm$ 25%	20.0(16.0)	6.50	5.10	3.60
CDRH5D28RH125NP-2R4PC	2R4	2.4 $\pm$ 25%	27.0(21.5)	5.30	4.00	3.20
CDRH5D28RH125NP-3R3PC	3R3	3.3 $\pm$ 25%	35.5(28.5)	4.30	3.40	2.72
CDRH5D28RH125NP-4R7PC	4R7	4.7 $\pm$ 25%	54.0(43.0)	3.70	2.89	2.20
CDRH5D28RH125NP-6R8PC	6R8	6.8 $\pm$ 25%	77.5(62.0)	3.08	2.44	1.80
CDRH5D28RH125NP-100MC	100	10 $\pm$ 20%	121(97.0)	2.46	1.93	1.40
CDRH5D28RH125NP-150MC	150	15 $\pm$ 20%	148(118)	2.08	1.63	1.24
CDRH5D28RH125NP-220MC	220	22 $\pm$ 20%	266(213)	1.70	1.33	0.90
CDRH5D28RH125NP-330MC	330	33 $\pm$ 20%	334(267)	1.41	1.12	0.80
CDRH5D28RH125NP-470MC	470	47 $\pm$ 20%	500(400)	1.16	0.91	0.64
CDRH5D28RH125NP-680MC	680	68 $\pm$ 20%	685(548)	0.95	0.74	0.54
CDRH5D28RH125NP-101MC	101	100 $\pm$ 20%	1020(815)	0.80	0.62	0.46

◆ CDRH6D38/T125

Part No.	Stamp	Inductance (μ H) [Within] ※1	D.C.R.(m Ω) Max.(Typ.) (at 20°C)	Saturation current (A)※2		Temperature rise current (A) ※3
				(at 20°C)	(at 125°C) (Typ.)	
CDRH6D38T125NP-3R0NC	3R0	3.0 $\pm$ 30%	22.0(17.5)	3.90	3.00	4.50
CDRH6D38T125NP-3R9NC	3R9	3.9 $\pm$ 30%	24.5(19.6)	3.30	2.50	4.00
CDRH6D38T125NP-4R7NC	4R7	4.7 $\pm$ 30%	27.5(22.0)	3.10	2.40	3.80
CDRH6D38T125NP-5R6NC	5R6	5.6 $\pm$ 30%	30.5(24.4)	2.85	2.10	3.50
CDRH6D38T125NP-6R8NC	6R8	6.8 $\pm$ 30%	33.0(26.4)	2.65	2.00	3.30
CDRH6D38T125NP-100PC	100	10 $\pm$ 25%	43.5(34.8)	2.20	1.70	3.00
CDRH6D38T125NP-150PC	150	15 $\pm$ 25%	59.8(47.8)	1.80	1.50	2.20
CDRH6D38T125NP-220PC	220	22 $\pm$ 25%	103.4(82.7)	1.50	1.00	1.65
CDRH6D38T125NP-330PC	330	33 $\pm$ 25%	145(116)	1.25	0.95	1.45
CDRH6D38T125NP-470PC	470	47 $\pm$ 25%	181(145)	1.00	0.80	1.20
CDRH6D38T125NP-680PC	680	68 $\pm$ 25%	250(200)	0.85	0.65	1.00
CDRH6D38T125NP-101PC	101	100 $\pm$ 25%	372(298)	0.68	0.55	0.85

Power Inductor

125°C CDRH Series



◆ CDRH8D43R/T125

Part Name	Stamp	Inductance (μ H) ※1	D.C.R.(m Ω) Max.(Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 125°C	
CDRH8D43RT125NP-1R0NC	1R0	1.0 $\pm$ 30%	9.7(7.8)	8.00	6.00	7.50
CDRH8D43RT125NP-1R8NC	1R8	1.8 $\pm$ 30%	12.1(9.7)	7.30	5.80	6.40
CDRH8D43RT125NP-2R4NC	2R4	2.4 $\pm$ 30%	14.0(11.2)	7.10	5.60	5.80
CDRH8D43RT125NP-3R3NC	3R3	3.3 $\pm$ 30%	16.3(13.0)	6.10	4.70	5.20
CDRH8D43RT125NP-4R3NC	4R3	4.3 $\pm$ 30%	23.5(18.8)	5.40	4.20	4.30
CDRH8D43RT125NP-5R6NC	5R6	5.6 $\pm$ 30%	26.9(21.5)	4.50	3.50	3.70
CDRH8D43RT125NP-6R8NC	6R8	6.8 $\pm$ 30%	29.8(23.9)	4.20	3.30	3.45
CDRH8D43RT125NP-8R2NC	8R2	8.2 $\pm$ 30%	40.8(32.6)	4.00	3.20	2.85
CDRH8D43RT125NP-100MC	100	10 $\pm$ 20%	45.0(36.0)	3.50	2.75	2.70
CDRH8D43RT125NP-150MC	150	15 $\pm$ 20%	61.8(49.4)	2.90	2.30	2.30
CDRH8D43RT125NP-220MC	220	22 $\pm$ 20%	77.6(62.0)	2.35	1.85	2.05
CDRH8D43RT125NP-330MC	330	33 $\pm$ 20%	123(98.5)	1.95	1.55	1.55
CDRH8D43RT125NP-470MC	470	47 $\pm$ 20%	186(149)	1.60	1.30	1.30
CDRH8D43RT125NP-680MC	680	68 $\pm$ 20%	288(231)	1.30	1.05	1.03
CDRH8D43RT125NP-101MC	101	100 $\pm$ 20%	353(282)	1.10	0.87	0.93
CDRH8D43RT125NP-151MC	151	150 $\pm$ 20%	575(460)	0.91	0.72	0.76
CDRH8D43RT125NP-221MC	221	220 $\pm$ 20%	861(689)	0.75	0.60	0.60
CDRH8D43RT125NP-331MC	331	330 $\pm$ 20%	1330(1068)	0.62	0.50	0.48

Power Inductor

125°C CDRH Series



◆CDRH104R/T125

Part Name	Stamp	Inductance (μ H) ※1	D.C.R.(Ω) Max.(Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 125°C	
CDRH104RT125NP-1R5PC	1R5	1.5 $\pm$ 25%	9.0m(7.2m)	9.20	7.36	7.80
CDRH104RT125NP-2R2PC	2R2	2.2 $\pm$ 25%	11.0m(8.8m)	8.00	6.16	7.10
CDRH104RT125NP-3R6PC	3R6	3.6 $\pm$ 25%	14.0m(11.2m)	6.07	5.00	6.20
CDRH104RT125NP-4R7PC	4R7	4.7 $\pm$ 25%	19.1m(15.3m)	5.57	4.60	5.20
CDRH104RT125NP-6R8PC	6R8	6.8 $\pm$ 25%	25.6m(20.5m)	4.66	3.94	4.40
CDRH104RT125NP-100MC	100	10 $\pm$ 20%	36.8m(29.5m)	4.10	3.46	3.50
CDRH104RT125NP-150MC	150	15 $\pm$ 20%	48.1m(38.5m)	3.34	2.80	2.90
CDRH104RT125NP-220MC	220	22 $\pm$ 20%	70.0m(56.0m)	2.56	2.18	2.30
CDRH104RT125NP-330MC	330	33 $\pm$ 20%	93.8m(75.0m)	2.14	1.80	2.05
CDRH104RT125NP-470MC	470	47 $\pm$ 20%	136m(109m)	1.80	1.51	1.68
CDRH104RT125NP-680MC	680	68 $\pm$ 20%	216m(173m)	1.57	1.32	1.25
CDRH104RT125NP-101MC	101	100 $\pm$ 20%	300m(240m)	1.30	1.10	1.05
CDRH104RT125NP-151MC	151	150 $\pm$ 20%	448m(358m)	1.00	0.85	0.86
CDRH104RT125NP-221MC	221	220 $\pm$ 20%	694m(555m)	0.85	0.72	0.68
CDRH104RT125NP-331MC	331	330 $\pm$ 20%	1.06(850m)	0.70	0.58	0.56

Power Inductor

125°C CDRH Series



◆CDRH10D68R/T125

Part No.	Stamp	Inductance (μ H) [Within] ※1	D.C.R.(m Ω) Max. (Typ.) (at 20°C)	Saturation current (A) ※2		Temperature rise current (A) ※3
				(at20°C)	(at125°C) (Typ)	
CDRH10D68RT125NP-1R5NC	1R5	1.5 $\pm$ 30%	6.1(4.9)	11.00	8.50	10.50
CDRH10D68RT125NP-2R2NC	2R2	2.2 $\pm$ 30%	7.1(5.7)	10.50	7.50	9.50
CDRH10D68RT125NP-3R3NC	3R3	3.3 $\pm$ 30%	8.5(6.8)	7.80	5.60	8.30
CDRH10D68RT125NP-4R7NC	4R7	4.7 $\pm$ 30%	9.9(7.9)	7.15	5.17	7.60
CDRH10D68RT125NP-6R2NC	6R2	6.2 $\pm$ 30%	14.2(11.3)	5.95	4.14	6.45
CDRH10D68RT125NP-7R5NC	7R5	7.5 $\pm$ 30%	16.4(13.0)	5.50	3.89	5.55
CDRH10D68RT125NP-100PC	100	10 $\pm$ 25%	21.4(17.1)	4.40	3.60	4.40
CDRH10D68RT125NP-150PC	150	15 $\pm$ 25%	30.6(24.5)	3.60	2.85	3.60
CDRH10D68RT125NP-220PC	220	22 $\pm$ 25%	39.1(31.3)	3.10	2.47	3.10
CDRH10D68RT125NP-330PC	330	33 $\pm$ 25%	59.1(47.3)	2.60	1.85	2.60
CDRH10D68RT125NP-470PC	470	47 $\pm$ 25%	88.3(70.6)	2.00	1.60	2.00
CDRH10D68RT125NP-680PC	680	68 $\pm$ 25%	125(100)	1.80	1.24	1.80
CDRH10D68RT125NP-101PC	101	100 $\pm$ 25%	175(140)	1.50	1.05	1.50
CDRH10D68RT125NP-151PC	151	150 $\pm$ 25%	250(200)	1.23	0.86	1.23
CDRH10D68RT125NP-221PC	221	220 $\pm$ 25%	370(296)	1.00	0.73	1.00
CDRH10D68RT125NP-331PC	331	330 $\pm$ 25%	465(372)	0.80	0.55	0.91
CDRH10D68RT125NP-471PC	471	470 $\pm$ 25%	703(562)	0.68	0.50	0.72
CDRH10D68RT125NP-681PC	681	680 $\pm$ 25%	1030(828)	0.60	0.40	0.61
CDRH10D68RT125NP-102PC	102	1000 $\pm$ 25%	1560(1253)	0.45	0.33	0.49

Power Inductor

125°C CDRH Series



◆CDRH125/L125

Part Name	Stamp	Inductance (μ H) ※1	D.C.R.(Ω) Max.(Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 125°C	
CDRH125L125NP-1R2NC	1R2	1.2 $\pm$ 30%	8.5m(6.8m)	14.20	11.60	9.00
CDRH125L125NP-1R8NC	1R8	1.8 $\pm$ 30%	10.6m(8.5m)	12.60	10.10	8.00
CDRH125L125NP-2R7NC	2R7	2.7 $\pm$ 30%	12.8m(10.2m)	10.20	8.20	7.40
CDRH125L125NP-3R9NC	3R9	3.9 $\pm$ 30%	15.0m(12.0m)	8.20	6.70	6.80
CDRH125L125NP-5R1NC	5R1	5.1 $\pm$ 30%	17.5m(14.0m)	7.20	5.90	6.50
CDRH125L125NP-6R8NC	6R8	6.8 $\pm$ 30%	20.0m(16.0m)	6.20	4.90	5.90
CDRH125L125NP-100MC	100	10 $\pm$ 20%	25.0m(20.0m)	5.20	4.10	5.30
CDRH125L125NP-150MC	150	15 $\pm$ 20%	33.8m(27.0m)	4.40	3.50	4.50
CDRH125L125NP-220MC	220	22 $\pm$ 20%	39.5m(31.5m)	3.50	2.81	3.70
CDRH125L125NP-330MC	330	33 $\pm$ 20%	59.0m(47.0m)	2.93	2.38	3.00
CDRH125L125NP-470MC	470	47 $\pm$ 20%	93.0m(74.0m)	2.44	2.00	2.42
CDRH125L125NP-680MC	680	68 $\pm$ 20%	131m(105m)	2.02	1.65	2.05
CDRH125L125NP-101MC	101	100 $\pm$ 20%	166m(133m)	1.70	1.37	1.82
CDRH125L125NP-151MC	151	150 $\pm$ 20%	271m(217m)	1.36	1.11	1.40
CDRH125L125NP-221MC	221	220 $\pm$ 20%	394m(315m)	1.12	0.90	1.15
CDRH125L125NP-331MC	331	330 $\pm$ 20%	674m(539m)	0.90	0.73	0.90
CDRH125L125NP-471MC	471	470 $\pm$ 20%	858m(686m)	0.75	0.61	0.81
CDRH125L125NP-681MC	681	680 $\pm$ 20%	1.22(1.02)	0.62	0.50	0.65
CDRH125L125NP-102MC	102	1000 $\pm$ 20%	1.90(1.58)	0.52	0.42	0.50

Power Inductor

125°C CDRH Series



◆ CDRH127/L125

Part Name	Stamp	Inductance (μ H) ※1	D.C.R.(m Ω) Max.(Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 125°C	
CDRH127L125NP-2R7NC	2R7	2.7 $\pm$ 30%	9.7(7.5)	15.50	13.80	9.00
CDRH127L125NP-3R6NC	3R6	3.6 $\pm$ 30%	11.0(8.5)	13.80	10.80	8.30
CDRH127L125NP-4R7NC	4R7	4.7 $\pm$ 30%	13.0(10.0)	12.30	9.85	7.80
CDRH127L125NP-6R2NC	6R2	6.2 $\pm$ 30%	14.6(11.3)	10.20	8.20	7.50
CDRH127L125NP-7R5NC	7R5	7.5 $\pm$ 30%	16.3(12.6)	9.20	7.37	7.00
CDRH127L125NP-100MC	100	10 $\pm$ 20%	23.6(18.2)	8.40	6.60	6.00
CDRH127L125NP-150MC	150	15 $\pm$ 20%	26.2(20.2)	6.40	5.30	5.60
CDRH127L125NP-220MC	220	22 $\pm$ 20%	36.7(28.3)	5.60	4.40	4.60
CDRH127L125NP-330MC	330	33 $\pm$ 20%	53.0(40.8)	4.30	3.40	3.80
CDRH127L125NP-470MC	470	47 $\pm$ 20%	83.2(64.0)	3.90	3.15	3.10
CDRH127L125NP-680MC	680	68 $\pm$ 20%	111.5(85.8)	3.10	2.50	2.60
CDRH127L125NP-101MC	101	100 $\pm$ 20%	171.2(131.7)	2.60	2.10	2.00
CDRH127L125NP-151MC	151	150 $\pm$ 20%	236(182)	2.10	1.70	1.80
CDRH127L125NP-221MC	221	220 $\pm$ 20%	347(267)	1.75	1.50	1.40
CDRH127L125NP-331MC	331	330 $\pm$ 20%	478(382)	1.42	1.12	1.18
CDRH127L125NP-471MC	471	470 $\pm$ 20%	731(585)	1.20	0.96	0.95
CDRH127L125NP-681MC	681	680 $\pm$ 20%	1102(882)	0.98	0.79	0.75
CDRH127L125NP-102MC	102	1000 $\pm$ 20%	1495(1196)	0.83	0.66	0.64

※1. Measuring condition: at 100kHz; 1.0V.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

For More Information

Hong Kong

Tel.+852-2880-6688
FAX.+852-2565-9600

Tokyo

Tel.+81-3-5202-7112
FAX.+81-3-5202-7105

Chicago

Tel.+1-847-545-6700
FAX. +1-847-545-6720

Shanghai

Tel.+86-021-5836-3299
FAX.+86-021-5836-3266

Seoul

Tel.+82-2-6237-0777
FAX.+82-2-6237-0778

Obernzell

Tel.+49-8591-937-0
FAX. +49-8591-937-103

Shenzhen

Tel.+86-755-8291-0228
FAX.+86-755-8291-0338

Singapore

Tel.+65-6296-3388
FAX.+65-6296-3390

Neumarkt

Tel.+49-9181-4509-110
FAX. +49-9181-4509-310

Taipei

Tel.+886-2-8751-2737
FAX.+886-2-8751-2738

San Jose

Tel.+1-408-321-9660
FAX.+1-408-321-9308