

## A FEATURES

- Available for ultra low profile
- Inductance ratings up to 1000  $\mu\text{H}$
- Operating Temperature range from  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  (Including Self-heating)
- $260^{\circ}\text{C}$  reflow peak temperature qualified



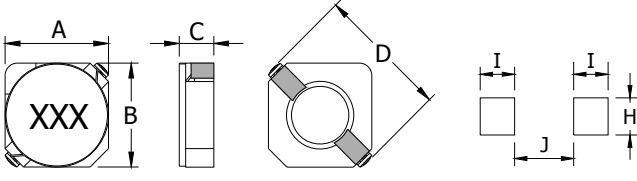
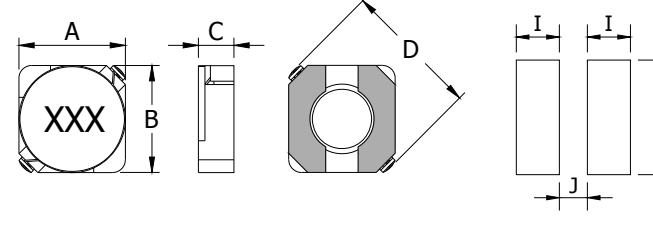
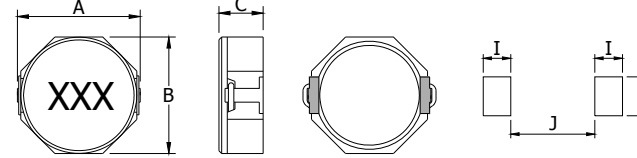
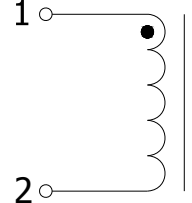
## B PART NUMBER SYSTEM

1MD   
 2D11   
 -   
 100   
 M   
 F  
1   
 2   
 3   
 4   
 5

<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">1</span>	Series
1MD	Series Code
<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">3</span>	Inductance Code
e.g.	Calculation
2R2	$2.2\mu\text{H}$
100	$10 \times 10^0 \mu\text{H} = 10\mu\text{H}$
101	$10 \times 10^1 \mu\text{H} = 100\mu\text{H}$
<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">4</span>	Inductance Tolerance
K	$\pm 10\%$
M	$\pm 20\%$
N	$\pm 30\%$
<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">5</span>	RoHS Compliant

<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span>	Dimension Code (L*W*H) (mm)	
	2D09(3.3×3.3×1.1)	2D11 (3.3×3.3×1.3)
	2D14(3.3×3.3×1.6)	2D18(3.3×3.3×2.1)
	3D11(4.2×4.2×1.3)	3D14(4.2×4.2×1.6)
	3D16(4.2×4.2×1.8)	3D18(4.2×4.2×2.1)
	3D28(4.2×4.2×3.2)	4D18(5.0×5.0×2.0)
	4D28(5.0×5.0×3.0)	5D18(6.0×6.0×2.0)
	5D28(6.0×6.0×3.0)	6D28(7.0×7.0×3.0)
	6D38(7.0×7.0×4.0)	8D28(10.1×8.3×3.0)
	8D38(10.1×8.3×4.0)	8D43(10.1×8.3×4.5)

C DRAWINGS AND DIMENSIONS

<p>2D09,2D11,2D14,2D18</p> 	<p>3D11,3D14,3D16,3D18,3D28,4D18,4D28,5D18,5D28,6D28,6D38</p> 
<p>8D28,8D38,8D43</p> 	<p>Schematic</p> 

XXX = Inductance value

Case Size	Dimensions (mm)						
	A <sub>max</sub>	B <sub>max</sub>	C <sub>max</sub>	D <sub>tvo</sub>	H <sub>ref.</sub>	I <sub>ref.</sub>	J <sub>ref.</sub>
1MD2D09	3.3	3.3	1.1	4.4	1.3	1.3	1.7
1MD2D11	3.3	3.3	1.3	4.4	1.3	1.3	1.7
1MD2D14	3.3	3.3	1.6	4.4	1.3	1.3	1.7
1MD2D18	3.3	3.3	2.1	4.4	1.3	1.3	1.7
1MD3D11	4.2	4.2	1.3	5.5	4.5	1.7	1.1
1MD3D14	4.2	4.2	1.6	5.5	4.5	1.7	1.1
1MD3D16	4.2	4.2	1.8	5.5	4.5	1.7	1.1
1MD3D18	4.2	4.2	2.1	5.5	4.5	1.7	1.1
1MD3D28	4.2	4.2	3.2	5.5	4.5	1.7	1.1
1MD4D18	5.0	5.0	2.0	6.9	5.3	1.9	1.5
1MD4D28	5.0	5.0	3.0	6.9	5.3	1.9	1.5
1MD5D18	6.0	6.0	2.0	8.2	6.3	2.1	2.0
1MD5D28	6.0	6.0	3.0	8.2	6.3	2.1	2.0
1MD6D28	7.0	7.0	3.0	9.5	7.3	2.6	2.0
1MD6D38	7.0	7.0	4.0	9.5	7.3	2.6	2.0
1MD8D28	10.1	8.3	3.0	/	2.8	2.0	6.1
1MD8D38	10.1	8.3	4.0	/	2.8	2.0	6.1
1MD8D43	10.1	8.3	4.5	/	2.8	2.0	6.1

**D SPECIFICATIONS**

Part Number	Inductance		DCR			
	$\mu\text{H}$	Tolerance	Typ.( $\Omega$ )	Max.( $\Omega$ )	Irms(A)	Isat(A)
1MD2D09-1R2NF	1.2	$\pm 30\%$	0.062	0.078	1.55	0.83
1MD2D09-1R5NF	1.5	$\pm 30\%$	0.071	0.088	1.35	0.70
1MD2D09-2R4NF	2.4	$\pm 30\%$	0.095	0.119	1.10	0.58
1MD2D09-3R3NF	3.3	$\pm 30\%$	0.139	0.174	0.90	0.50
1MD2D09-4R7NF	4.7	$\pm 30\%$	0.190	0.238	0.80	0.38
1MD2D09-6R8NF	6.8	$\pm 30\%$	0.232	0.290	0.65	0.36
1MD2D09-8R2NF	8.2	$\pm 30\%$	0.320	0.400	0.56	0.31
1MD2D09-100MF	10	$\pm 20\%$	0.400	0.500	0.51	0.30
1MD2D09-120MF	12	$\pm 20\%$	0.440	0.550	0.45	0.27
1MD2D09-150MF	15	$\pm 20\%$	0.520	0.650	0.42	0.24
1MD2D09-180MF	18	$\pm 20\%$	0.610	0.770	0.38	0.22
1MD2D09-220MF	22	$\pm 20\%$	0.750	0.940	0.35	0.20
1MD2D09-270MF	27	$\pm 20\%$	0.880	1.110	0.32	0.16
1MD2D11-1R0NF	1.0	$\pm 30\%$	0.050	0.063	1.70	1.50
1MD2D11-1R5NF	1.5	$\pm 30\%$	0.067	0.084	1.45	1.25
1MD2D11-2R2NF	2.2	$\pm 30\%$	0.076	0.096	1.40	1.10
1MD2D11-2R7NF	2.7	$\pm 30\%$	0.096	0.120	1.20	0.92
1MD2D11-3R3NF	3.3	$\pm 30\%$	0.123	0.154	1.00	0.88
1MD2D11-4R7NF	4.7	$\pm 30\%$	0.198	0.248	0.80	0.70
1MD2D11-5R6NF	5.6	$\pm 30\%$	0.211	0.264	0.75	0.65
1MD2D11-6R8NF	6.8	$\pm 30\%$	0.227	0.284	0.72	0.60
1MD2D11-8R2NF	8.2	$\pm 30\%$	0.301	0.376	0.60	0.52
1MD2D11-100MF	10	$\pm 20\%$	0.342	0.428	0.58	0.48
1MD2D11-150MF	15	$\pm 20\%$	0.530	0.663	0.46	0.40
1MD2D11-180MF	18	$\pm 20\%$	0.584	0.730	0.43	0.36
1MD2D11-220MF	22	$\pm 20\%$	0.641	0.801	0.42	0.35
1MD2D14-R21NF	0.21	$\pm 30\%$	0.016	0.021	4.74	3.80
1MD2D14-R36NF	0.36	$\pm 30\%$	0.020	0.026	4.10	3.25
1MD2D14-R60NF	0.60	$\pm 30\%$	0.025	0.033	3.45	2.20
1MD2D14-R82NF	0.82	$\pm 30\%$	0.030	0.039	2.85	2.10
1MD2D14-1R2NF	1.2	$\pm 30\%$	0.038	0.049	2.75	1.95
1MD2D14-1R5NF	1.5	$\pm 30\%$	0.050	0.063	2.00	1.80
1MD2D14-1R8NF	1.8	$\pm 30\%$	0.060	0.075	1.80	1.65
1MD2D14-2R2NF	2.2	$\pm 30\%$	0.075	0.094	1.60	1.50
1MD2D14-2R7NF	2.7	$\pm 30\%$	0.085	0.106	1.40	1.35
1MD2D14-3R3NF	3.3	$\pm 30\%$	0.100	0.125	1.24	1.20
1MD2D14-3R9NF	3.9	$\pm 30\%$	0.110	0.138	1.12	1.10
1MD2D14-4R7NF	4.7	$\pm 30\%$	0.135	0.169	1.00	1.00
1MD2D14-5R6NF	5.6	$\pm 30\%$	0.150	0.188	0.98	0.95
1MD2D14-6R8NF	6.8	$\pm 30\%$	0.170	0.213	0.92	0.85
1MD2D14-8R2NF	8.2	$\pm 30\%$	0.225	0.281	0.80	0.80
1MD2D14-100MF	10	$\pm 20\%$	0.235	0.294	0.76	0.70
1MD2D14-120MF	12	$\pm 20\%$	0.315	0.394	0.64	0.62
1MD2D18-2R2NF	2.2	$\pm 30\%$	0.033	0.041	2.30	0.85
1MD2D18-3R3NF	3.3	$\pm 30\%$	0.043	0.054	2.10	0.75
1MD2D18-4R7NF	4.7	$\pm 30\%$	0.062	0.078	1.65	0.63
1MD2D18-6R8NF	6.8	$\pm 30\%$	0.085	0.106	1.32	0.52
1MD2D18-100MF	10	$\pm 20\%$	0.145	0.180	1.00	0.43
1MD2D18-150MF	15	$\pm 20\%$	0.175	0.220	0.80	0.35
1MD2D18-220MF	22	$\pm 20\%$	0.255	0.320	0.68	0.30
1MD2D18-330MF	33	$\pm 20\%$	0.370	0.460	0.56	0.24

Part Number	Inductance		DCR			
	$\mu\text{H}$	Tolerance	Typ.( $\Omega$ )	Max.( $\Omega$ )	Irms(A)	Isat(A)
1MD2D18-470MF	47	$\pm 20\%$	0.530	0.680	0.48	0.20
1MD3D11-2R7NF	2.7	$\pm 30\%$	0.060	0.078	1.82	0.53
1MD3D11-4R7NF	4.7	$\pm 30\%$	0.095	0.123	1.38	0.40
1MD3D11-6R8NF	6.8	$\pm 30\%$	0.150	0.180	1.05	0.34
1MD3D11-8R2NF	8.2	$\pm 30\%$	0.170	0.204	0.93	0.32
1MD3D11-100MF	10	$\pm 20\%$	0.200	0.240	0.90	0.28
1MD3D11-120MF	12	$\pm 20\%$	0.230	0.276	0.81	0.25
1MD3D11-150MF	15	$\pm 20\%$	0.310	0.372	0.68	0.23
1MD3D11-180MF	18	$\pm 20\%$	0.390	0.468	0.58	0.21
1MD3D11-220MF	22	$\pm 20\%$	0.450	0.540	0.53	0.19
1MD3D11-270MF	27	$\pm 20\%$	0.605	0.726	0.48	0.17
1MD3D11-330MF	33	$\pm 20\%$	0.685	0.822	0.41	0.15
1MD3D11-390MF	39	$\pm 20\%$	0.785	0.942	0.40	0.14
1MD3D14-1R2NF	1.2	$\pm 30\%$	0.036	0.045	2.20	2.15
1MD3D14-1R7NF	1.7	$\pm 30\%$	0.050	0.063	2.00	1.85
1MD3D14-2R2NF	2.2	$\pm 30\%$	0.055	0.069	1.75	1.60
1MD3D14-2R7NF	2.7	$\pm 30\%$	0.070	0.088	1.36	1.45
1MD3D14-3R3NF	3.3	$\pm 30\%$	0.080	0.100	1.24	1.35
1MD3D14-3R9NF	3.9	$\pm 30\%$	0.110	0.135	1.12	1.15
1MD3D14-4R7NF	4.7	$\pm 30\%$	0.120	0.150	0.96	1.10
1MD3D14-8R2NF	8.2	$\pm 30\%$	0.190	0.238	0.74	0.82
1MD3D14-100MF	10	$\pm 20\%$	0.210	0.262	0.69	0.75
1MD3D14-120MF	12	$\pm 20\%$	0.280	0.350	0.60	0.67
1MD3D14-150MF	15	$\pm 20\%$	0.390	0.488	0.58	0.60
1MD3D14-220MF	22	$\pm 20\%$	0.460	0.575	0.43	0.52
1MD3D16-1R5NF	1.5	$\pm 30\%$	0.040	0.052	2.29	1.55
1MD3D16-2R2NF	2.2	$\pm 30\%$	0.055	0.072	1.95	1.20
1MD3D16-3R3NF	3.3	$\pm 30\%$	0.065	0.085	1.80	1.10
1MD3D16-4R7NF	4.7	$\pm 30\%$	0.080	0.105	1.62	0.90
1MD3D16-6R8NF	6.8	$\pm 30\%$	0.130	0.170	1.27	0.73
1MD3D16-100MF	10	$\pm 20\%$	0.160	0.210	1.15	0.55
1MD3D16-150MF	15	$\pm 20\%$	0.225	0.295	0.97	0.45
1MD3D16-220MF	22	$\pm 20\%$	0.330	0.430	0.80	0.40
1MD3D16-330MF	33	$\pm 20\%$	0.520	0.675	0.64	0.32
1MD3D18-1R0NF	1.0	$\pm 30\%$	0.040	0.050	2.40	2.80
1MD3D18-2R2NF	2.2	$\pm 30\%$	0.050	0.063	2.00	1.80
1MD3D18-3R0NF	3.0	$\pm 30\%$	0.055	0.069	1.80	1.60
1MD3D18-4R7NF	4.7	$\pm 30\%$	0.086	0.108	1.35	1.35
1MD3D18-6R8NF	6.8	$\pm 30\%$	0.120	0.150	1.10	1.10
1MD3D18-100MF	10	$\pm 20\%$	0.164	0.205	0.90	0.90
1MD3D18-120MF	12	$\pm 20\%$	0.220	0.275	0.80	0.80
1MD3D18-150MF	15	$\pm 20\%$	0.241	0.302	0.75	0.75
1MD3D18-220MF	22	$\pm 20\%$	0.339	0.424	0.60	0.60
1MD3D18-330MF	33	$\pm 20\%$	0.512	0.640	0.45	0.50
1MD3D18-470MF	47	$\pm 20\%$	0.771	0.964	0.35	0.40
1MD3D28-3R3NF	3.3	$\pm 30\%$	0.058	0.072	1.85	2.00
1MD3D28-4R7NF	4.7	$\pm 30\%$	0.071	0.088	1.62	1.65
1MD3D28-6R8NF	6.8	$\pm 30\%$	0.095	0.119	1.32	1.24
1MD3D28-100MF	10	$\pm 20\%$	0.116	0.145	1.18	1.05
1MD3D28-150MF	15	$\pm 20\%$	0.170	0.213	1.02	0.90
1MD3D28-220MF	22	$\pm 20\%$	0.268	0.335	0.74	0.76
1MD3D28-330MF	33	$\pm 20\%$	0.385	0.481	0.63	0.58
1MD3D28-470MF	47	$\pm 20\%$	0.479	0.599	0.56	0.48
1MD4D18-1R0NF	1.0	$\pm 30\%$	0.035	0.045	2.27	1.72

Part Number	Inductance		DCR			
	$\mu\text{H}$	Tolerance	Typ.( $\Omega$ )	Max.( $\Omega$ )	Irms(A)	Isat(A)
1MD4D18-2R2NF	2.2	$\pm 30\%$	0.058	0.075	1.76	1.32
1MD4D18-2R7NF	2.7	$\pm 30\%$	0.080	0.105	1.50	1.28
1MD4D18-3R3NF	3.3	$\pm 30\%$	0.085	0.110	1.46	1.04
1MD4D18-3R9NF	3.9	$\pm 30\%$	0.120	0.155	1.22	0.88
1MD4D18-4R7NF	4.7	$\pm 30\%$	0.125	0.162	1.20	0.84
1MD4D18-5R6NF	5.6	$\pm 30\%$	0.130	0.170	1.18	0.80
1MD4D18-6R8NF	6.8	$\pm 30\%$	0.155	0.200	1.08	0.76
1MD4D18-8R2NF	8.2	$\pm 30\%$	0.190	0.245	0.97	0.68
1MD4D18-100MF	10	$\pm 20\%$	0.148	0.200	1.10	0.61
1MD4D18-120MF	12	$\pm 20\%$	0.156	0.210	1.07	0.56
1MD4D18-150MF	15	$\pm 20\%$	0.178	0.240	1.01	0.50
1MD4D18-180MF	18	$\pm 20\%$	0.250	0.338	0.85	0.48
1MD4D18-220MF	22	$\pm 20\%$	0.294	0.397	0.78	0.41
1MD4D18-270MF	27	$\pm 20\%$	0.327	0.441	0.74	0.35
1MD4D18-330MF	33	$\pm 20\%$	0.514	0.694	0.59	0.32
1MD4D18-390MF	39	$\pm 20\%$	0.525	0.709	0.59	0.30
1MD4D18-470MF	47	$\pm 20\%$	0.683	0.922	0.51	0.28
1MD4D18-560MF	56	$\pm 20\%$	0.800	1.080	0.47	0.26
1MD4D18-680MF	68	$\pm 20\%$	1.000	1.300	0.42	0.24
1MD4D18-820MF	82	$\pm 20\%$	1.200	1.560	0.39	0.22
1MD4D18-101MF	100	$\pm 20\%$	1.330	1.730	0.37	0.20
1MD4D18-121MF	120	$\pm 20\%$	1.840	2.390	0.31	0.18
1MD4D18-151MF	150	$\pm 20\%$	2.050	2.670	0.30	0.15
1MD4D18-181MF	180	$\pm 20\%$	3.050	4.000	0.24	0.14
1MD4D28-1R2NF	1.2	$\pm 30\%$	0.018	0.024	3.21	2.56
1MD4D28-1R8NF	1.8	$\pm 30\%$	0.020	0.028	2.97	2.20
1MD4D28-2R2NF	2.2	$\pm 30\%$	0.023	0.031	2.79	2.04
1MD4D28-2R7NF	2.7	$\pm 30\%$	0.032	0.043	2.37	1.60
1MD4D28-3R3NF	3.3	$\pm 30\%$	0.036	0.049	2.22	1.57
1MD4D28-3R9NF	3.9	$\pm 30\%$	0.048	0.065	1.94	1.44
1MD4D28-4R7NF	4.7	$\pm 30\%$	0.053	0.072	1.84	1.32
1MD4D28-5R6NF	5.6	$\pm 30\%$	0.075	0.101	1.55	1.17
1MD4D28-6R8NF	6.8	$\pm 30\%$	0.081	0.109	1.49	1.12
1MD4D28-8R2NF	8.2	$\pm 30\%$	0.087	0.118	1.44	1.04
1MD4D28-100MF	10	$\pm 20\%$	0.095	0.128	1.38	1.00
1MD4D28-120MF	12	$\pm 20\%$	0.098	0.132	1.36	0.84
1MD4D28-150MF	15	$\pm 20\%$	0.110	0.149	1.28	0.76
1MD4D28-180MF	18	$\pm 20\%$	0.123	0.166	1.21	0.72
1MD4D28-220MF	22	$\pm 20\%$	0.175	0.235	1.02	0.70
1MD4D28-270MF	27	$\pm 20\%$	0.193	0.261	0.96	0.58
1MD4D28-330MF	33	$\pm 20\%$	0.255	0.331	0.84	0.56
1MD4D28-390MF	39	$\pm 20\%$	0.284	0.384	0.80	0.50
1MD4D28-470MF	47	$\pm 20\%$	0.435	0.587	0.64	0.48
1MD4D28-560MF	56	$\pm 20\%$	0.463	0.625	0.62	0.41
1MD4D28-680MF	68	$\pm 20\%$	0.518	0.699	0.59	0.35
1MD4D28-820MF	82	$\pm 20\%$	0.678	0.915	0.52	0.32
1MD4D28-101MF	100	$\pm 20\%$	0.766	1.020	0.48	0.29
1MD4D28-121MF	120	$\pm 20\%$	0.977	1.270	0.43	0.27
1MD4D28-151MF	150	$\pm 20\%$	1.080	1.350	0.41	0.24
1MD4D28-181MF	180	$\pm 20\%$	1.230	1.540	0.38	0.22
1MD4D28-221MF	220	$\pm 20\%$	1.376	1.720	0.36	0.20
1MD4D28-271MF	270	$\pm 20\%$	1.560	1.950	0.34	0.16
1MD5D18-2R2NF	2.2	$\pm 30\%$	0.027	0.037	2.58	2.40
1MD5D18-3R3NF	3.3	$\pm 30\%$	0.035	0.047	2.27	2.00

Part Number	Inductance		DCR			
	$\mu\text{H}$	Tolerance	Typ.( $\Omega$ )	Max.( $\Omega$ )	Irms(A)	Isat(A)
1MD5D18-4R1NF	4.1	$\pm 30\%$	0.042	0.057	2.07	1.95
1MD5D18-5R4NF	5.4	$\pm 30\%$	0.056	0.076	1.79	1.60
1MD5D18-6R2NF	6.2	$\pm 30\%$	0.071	0.096	1.59	1.40
1MD5D18-8R9NF	8.9	$\pm 30\%$	0.086	0.116	1.45	1.25
1MD5D18-100MF	10	$\pm 20\%$	0.092	0.124	1.40	1.20
1MD5D18-120MF	12	$\pm 20\%$	0.113	0.153	1.26	1.10
1MD5D18-150MF	15	$\pm 20\%$	0.145	0.196	1.11	0.97
1MD5D18-180MF	18	$\pm 20\%$	0.155	0.210	1.08	0.85
1MD5D18-220MF	22	$\pm 20\%$	0.215	0.290	0.91	0.80
1MD5D18-270MF	27	$\pm 20\%$	0.245	0.330	0.86	0.75
1MD5D18-330MF	33	$\pm 20\%$	0.285	0.385	0.79	0.65
1MD5D18-390MF	39	$\pm 20\%$	0.385	0.520	0.68	0.57
1MD5D18-470MF	47	$\pm 20\%$	0.440	0.595	0.64	0.54
1MD5D18-560MF	56	$\pm 20\%$	0.493	0.665	0.60	0.50
1MD5D18-680MF	68	$\pm 20\%$	0.622	0.840	0.54	0.43
1MD5D18-820MF	82	$\pm 20\%$	0.725	0.978	0.50	0.41
1MD5D18-101MF	100	$\pm 20\%$	0.895	1.200	0.45	0.36
1MD5D18-121MF	120	$\pm 20\%$	1.200	1.500	0.39	0.33
1MD5D18-151MF	150	$\pm 20\%$	1.368	1.710	0.36	0.31
1MD5D18-181MF	180	$\pm 20\%$	2.704	3.380	0.26	0.21
1MD5D18-221MF	220	$\pm 20\%$	3.472	4.340	0.23	0.18
1MD5D28-2R5NF	2.5	$\pm 30\%$	0.013	0.018	3.72	2.60
1MD5D28-3R0NF	3.0	$\pm 30\%$	0.018	0.024	3.16	2.40
1MD5D28-4R2NF	4.2	$\pm 30\%$	0.023	0.031	2.80	2.20
1MD5D28-5R3NF	5.3	$\pm 30\%$	0.028	0.038	2.54	1.90
1MD5D28-6R2NF	6.2	$\pm 30\%$	0.033	0.045	2.34	1.80
1MD5D28-8R2NF	8.2	$\pm 30\%$	0.039	0.053	2.15	1.60
1MD5D28-100MF	10	$\pm 20\%$	0.048	0.065	1.94	1.30
1MD5D28-120MF	12	$\pm 20\%$	0.056	0.076	1.79	1.20
1MD5D28-150MF	15	$\pm 20\%$	0.076	0.103	1.54	1.10
1MD5D28-180MF	18	$\pm 20\%$	0.082	0.110	1.48	1.00
1MD5D28-220MF	22	$\pm 20\%$	0.090	0.122	1.41	0.90
1MD5D28-270MF	27	$\pm 20\%$	0.120	0.175	1.22	0.85
1MD5D28-330MF	33	$\pm 20\%$	0.140	0.189	1.13	0.75
1MD5D28-390MF	39	$\pm 20\%$	0.157	0.212	1.07	0.70
1MD5D28-470MF	47	$\pm 20\%$	0.185	0.250	0.99	0.62
1MD5D28-560MF	56	$\pm 20\%$	0.226	0.305	0.89	0.58
1MD5D28-680MF	68	$\pm 20\%$	0.263	0.355	0.83	0.52
1MD5D28-820MF	82	$\pm 20\%$	0.343	0.463	0.72	0.46
1MD5D28-101MF	100	$\pm 20\%$	0.385	0.520	0.68	0.42
1MD5D28-121MF	120	$\pm 20\%$	0.448	0.560	0.63	0.40
1MD5D28-151MF	150	$\pm 20\%$	0.544	0.680	0.58	0.35
1MD5D28-181MF	180	$\pm 20\%$	0.744	0.930	0.49	0.32
1MD5D28-221MF	220	$\pm 20\%$	0.920	1.150	0.44	0.30
1MD5D28-271MF	270	$\pm 20\%$	1.248	1.560	0.38	0.27
1MD5D28-331MF	330	$\pm 20\%$	1.584	1.980	0.34	0.25
1MD5D28-391MF	390	$\pm 20\%$	2.000	2.500	0.30	0.22
1MD5D28-471MF	470	$\pm 20\%$	2.160	2.700	0.29	0.20
1MD5D28-561MF	560	$\pm 20\%$	2.496	3.120	0.27	0.18
1MD5D28-681MF	680	$\pm 20\%$	3.320	4.150	0.23	0.16
1MD6D28-3R0NF	3.0	$\pm 30\%$	0.018	0.024	3.33	3.00
1MD6D28-3R9NF	3.9	$\pm 30\%$	0.020	0.027	3.16	2.60
1MD6D28-5R0NF	5.0	$\pm 30\%$	0.023	0.031	2.95	2.40
1MD6D28-6R0NF	6.0	$\pm 30\%$	0.026	0.035	2.77	2.25

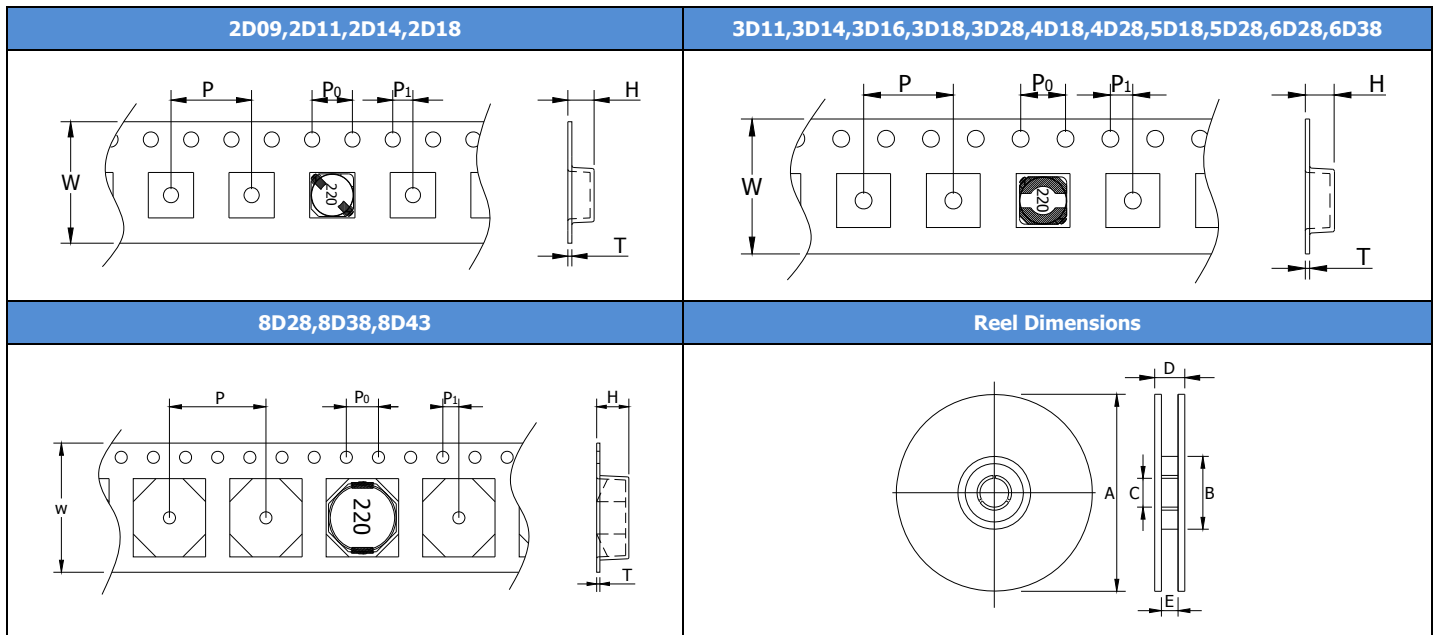
Part Number	Inductance		DCR			
	$\mu\text{H}$	Tolerance	Typ.( $\Omega$ )	Max.( $\Omega$ )	Irms(A)	Isat(A)
1MD6D28-7R3NF	7.3	$\pm 30\%$	0.040	0.054	2.24	2.10
1MD6D28-8R6NF	8.6	$\pm 30\%$	0.043	0.058	2.16	1.85
1MD6D28-100MF	10	$\pm 20\%$	0.048	0.065	2.04	1.70
1MD6D28-120MF	12	$\pm 20\%$	0.052	0.070	1.96	1.55
1MD6D28-150MF	15	$\pm 20\%$	0.062	0.084	1.80	1.40
1MD6D28-180MF	18	$\pm 20\%$	0.070	0.095	1.69	1.32
1MD6D28-220MF	22	$\pm 20\%$	0.095	0.128	1.45	1.20
1MD6D28-270MF	27	$\pm 20\%$	0.105	0.142	1.38	1.05
1MD6D28-330MF	33	$\pm 20\%$	0.122	0.165	1.28	0.97
1MD6D28-390MF	39	$\pm 20\%$	0.156	0.210	1.13	0.86
1MD6D28-470MF	47	$\pm 20\%$	0.176	0.238	1.07	0.80
1MD6D28-560MF	56	$\pm 20\%$	0.205	0.277	0.99	0.73
1MD6D28-680MF	68	$\pm 20\%$	0.225	0.304	0.94	0.65
1MD6D28-820MF	82	$\pm 20\%$	0.290	0.390	0.83	0.60
1MD6D28-101MF	100	$\pm 20\%$	0.397	0.535	0.71	0.54
1MD6D28-121MF	120	$\pm 20\%$	0.600	0.750	0.58	0.51
1MD6D28-151MF	150	$\pm 20\%$	0.760	0.950	0.51	0.47
1MD6D28-181MF	180	$\pm 20\%$	0.960	1.200	0.46	0.41
1MD6D28-221MF	220	$\pm 20\%$	1.200	1.500	0.41	0.37
1MD6D28-271MF	270	$\pm 20\%$	1.360	1.700	0.38	0.33
1MD6D28-331MF	330	$\pm 20\%$	1.720	2.150	0.34	0.28
1MD6D28-471MF	470	$\pm 20\%$	2.520	3.150	0.28	0.21
1MD6D28-681MF	680	$\pm 20\%$	4.120	5.150	0.22	0.20
1MD6D38-3R3NF	3.3	$\pm 30\%$	0.015	0.020	4.08	3.50
1MD6D38-5R0NF	5.0	$\pm 30\%$	0.018	0.024	3.73	2.90
1MD6D38-6R2NF	6.2	$\pm 30\%$	0.020	0.027	3.54	2.50
1MD6D38-7R4NF	7.4	$\pm 30\%$	0.023	0.031	3.30	2.30
1MD6D38-8R7NF	8.7	$\pm 30\%$	0.025	0.034	3.16	2.20
1MD6D38-100MF	10	$\pm 20\%$	0.028	0.038	2.99	2.00
1MD6D38-120MF	12	$\pm 20\%$	0.039	0.053	2.53	1.70
1MD6D38-150MF	15	$\pm 20\%$	0.042	0.057	2.44	1.60
1MD6D38-180MF	18	$\pm 20\%$	0.068	0.092	1.92	1.50
1MD6D38-220MF	22	$\pm 20\%$	0.071	0.096	1.88	1.30
1MD6D38-270MF	27	$\pm 20\%$	0.081	0.109	1.76	1.20
1MD6D38-330MF	33	$\pm 20\%$	0.092	0.124	1.65	1.10
1MD6D38-390MF	39	$\pm 20\%$	0.102	0.138	1.57	1.00
1MD6D38-470MF	47	$\pm 20\%$	0.115	0.155	1.47	0.95
1MD6D38-560MF	56	$\pm 20\%$	0.140	0.202	1.34	0.85
1MD6D38-680MF	68	$\pm 20\%$	0.173	0.234	1.20	0.75
1MD6D38-820MF	82	$\pm 20\%$	0.240	0.324	1.02	0.70
1MD6D38-101MF	100	$\pm 20\%$	0.265	0.358	0.97	0.65
1MD6D38-121MF	120	$\pm 20\%$	0.376	0.470	0.82	0.59
1MD6D38-151MF	150	$\pm 20\%$	0.464	0.580	0.73	0.54
1MD6D38-181MF	180	$\pm 20\%$	0.552	0.690	0.67	0.49
1MD6D38-221MF	220	$\pm 20\%$	0.712	0.890	0.59	0.43
1MD6D38-271MF	270	$\pm 20\%$	1.032	1.290	0.49	0.40
1MD6D38-331MF	330	$\pm 20\%$	1.360	1.700	0.43	0.37
1MD6D38-391MF	390	$\pm 20\%$	1.400	1.750	0.42	0.34
1MD6D38-471MF	470	$\pm 20\%$	1.760	2.200	0.38	0.32
1MD6D38-561MF	560	$\pm 20\%$	2.280	2.850	0.33	0.29
1MD6D38-681MF	680	$\pm 20\%$	2.560	3.200	0.31	0.25
1MD6D38-821MF	820	$\pm 20\%$	3.240	4.050	0.28	0.22
1MD6D38-102MF	1000	$\pm 20\%$	4.560	5.700	0.23	0.20
1MD8D28-1R0NF	1.0	$\pm 30\%$	0.008	0.011	6.50	7.00

Part Number	Inductance		DCR			
	$\mu\text{H}$	Tolerance	Typ.( $\Omega$ )	Max.( $\Omega$ )	Irms(A)	Isat(A)
1MD8D28-2R5NF	2.5	$\pm 30\%$	0.012	0.016	4.50	6.40
1MD8D28-3R3NF	3.3	$\pm 30\%$	0.014	0.018	4.00	6.00
1MD8D28-4R7NF	4.7	$\pm 30\%$	0.019	0.025	3.40	4.50
1MD8D28-7R3NF	7.3	$\pm 30\%$	0.030	0.039	2.80	3.40
1MD8D28-100MF	10	$\pm 20\%$	0.036	0.047	2.50	3.20
1MD8D28-150MF	15	$\pm 20\%$	0.053	0.069	1.90	2.35
1MD8D28-220MF	22	$\pm 20\%$	0.076	0.099	1.60	1.85
1MD8D28-330MF	33	$\pm 20\%$	0.120	0.156	1.30	1.45
1MD8D28-470MF	47	$\pm 20\%$	0.150	0.195	1.15	1.30
1MD8D28-680MF	68	$\pm 20\%$	0.220	0.286	0.92	0.98
1MD8D28-101MF	100	$\pm 20\%$	0.330	0.430	0.75	0.80
1MD8D38-1R8NF	1.8	$\pm 30\%$	0.013	0.016	6.80	7.00
1MD8D38-2R5NF	2.5	$\pm 30\%$	0.014	0.018	6.00	6.50
1MD8D38-3R5NF	3.5	$\pm 30\%$	0.019	0.024	5.20	5.00
1MD8D38-4R7NF	4.7	$\pm 30\%$	0.023	0.029	4.40	4.60
1MD8D38-6R0NF	6.0	$\pm 30\%$	0.025	0.032	4.00	4.20
1MD8D38-100MF	10	$\pm 20\%$	0.038	0.048	3.20	3.00
1MD8D38-150MF	15	$\pm 20\%$	0.053	0.067	2.50	2.75
1MD8D38-220MF	22	$\pm 20\%$	0.084	0.105	2.00	2.30
1MD8D38-330MF	33	$\pm 20\%$	0.125	0.157	1.60	1.75
1MD8D38-470MF	47	$\pm 20\%$	0.151	0.189	1.42	1.52
1MD8D38-680MF	68	$\pm 20\%$	0.232	0.290	1.08	1.30
1MD8D38-101MF	100	$\pm 20\%$	0.328	0.410	0.88	1.05
1MD8D43-R68NF	0.68	$\pm 30\%$	0.007	0.010	6.90	9.00
1MD8D43-1R2NF	1.2	$\pm 30\%$	0.009	0.012	6.20	8.00
1MD8D43-2R0NF	2.0	$\pm 30\%$	0.011	0.014	5.50	7.00
1MD8D43-3R9NF	3.9	$\pm 30\%$	0.015	0.019	4.50	5.90
1MD8D43-4R7NF	4.7	$\pm 30\%$	0.017	0.022	4.10	5.60
1MD8D43-6R8NF	6.8	$\pm 30\%$	0.020	0.025	3.90	4.40
1MD8D43-100MF	10	$\pm 20\%$	0.029	0.036	3.20	4.00
1MD8D43-150MF	15	$\pm 20\%$	0.042	0.053	2.30	2.90
1MD8D43-220MF	22	$\pm 20\%$	0.060	0.075	1.80	2.60
1MD8D43-330MF	33	$\pm 20\%$	0.100	0.125	1.40	2.20
1MD8D43-470MF	47	$\pm 20\%$	0.120	0.150	1.30	1.80
1MD8D43-680MF	68	$\pm 20\%$	0.190	0.240	1.00	1.50
1MD8D43-101MF	100	$\pm 20\%$	0.290	0.360	0.80	1.30

1. Inductance measured @ 100KHz, 0.3V at 25°C temperature.
2. DCR measured @ 25°C.
3. Irms: DC current for an approximate 40°C rise from 20°C ambient temperature.
4. Isat: DC current for approximate 35% roll off at 25°C.
5. Specifications subject to change without notice please check our website for latest information.

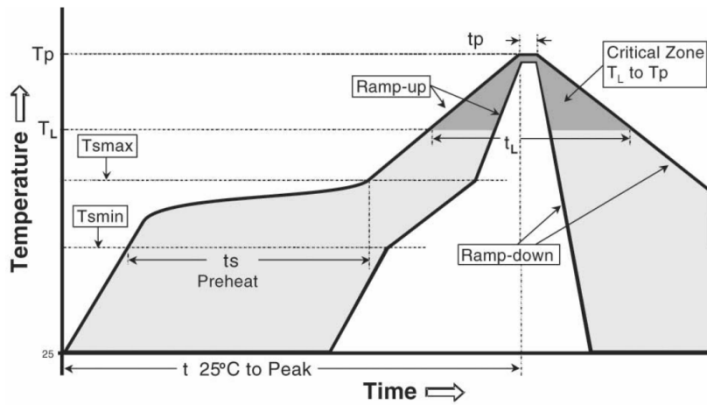
## E TAPE AND REEL SPECIFICATIONS





Case Size	Parts per Reel	Reel Dimensions(REF)					Tape Dimensions(REF)					
		A	B	C	D	E	W	P	P <sub>0</sub>	P <sub>1</sub>	H	T
1MD2D09	3000	330	100	13	19.5	13.5	12.0	8	4	2	1.4	0.3
1MD2D11	3000	330	100	13	19.5	13.5	12.0	8	4	2	1.6	0.3
1MD2D14	3000	330	100	13	19.5	13.5	12.0	8	4	2	1.6	0.3
1MD2D18	3000	330	100	13	19.5	13.5	12.0	8	4	2	2.1	0.3
1MD3D11	3000	330	100	13	19.5	13.5	12.0	8	4	2	2.1	0.3
1MD3D14	3000	330	100	13	19.5	13.5	12.0	8	4	2	2.1	0.3
1MD3D16	3000	330	100	13	19.5	13.5	12.0	8	4	2	2.1	0.3
1MD3D18	3000	330	100	13	19.5	13.5	12.0	8	4	2	2.1	0.3
1MD3D28	3000	330	100	13	19.5	13.5	12.0	8	4	2	3.3	0.3
1MD4D18	3000	330	100	13	19.5	13.5	12.0	8	4	2	2.1	0.3
1MD4D28	2500	330	100	13	19.5	13.5	12.0	8	4	2	3.3	0.3
1MD5D18	4000	330	100	13	19.5	13.5	12.0	8	4	2	2.2	0.3
1MD5D28	2500	330	100	13	19.5	13.5	12.0	8	4	2	3.2	0.3
1MD6D28	1500	330	100	13	22.5	16.5	16.0	12	4	2	3.4	0.4
1MD6D38	1000	330	100	13	22.5	16.5	16.0	12	4	2	4.5	0.4
1MD8D28	1000	330	100	13	22.5	16.5	16.0	12	4	2	3.5	0.4
1MD8D38	1000	330	100	13	22.5	16.5	16.0	12	4	2	4.3	0.4
1MD8D43	800	330	100	13	22.5	16.5	16.0	12	4	2	4.3	0.4

**F RECOMMENDED SOLDER REFLOW PROFILE**



Profile Feature	Recommended Conditions
Average ramp-up rate (Tsmax to Tp)	3°C/second max.
Preheat	
Temperature Min (Ts <sub>min</sub> )	100°C
Temperature Max (Ts <sub>max</sub> )	150°C
Time (Ts <sub>min</sub> to Ts <sub>max</sub> )(ts)	60-180 seconds
Time maintained above:	
Temperature (T <sub>L</sub> )	217°C
Time (t <sub>L</sub> )	60-150 seconds
Peak Temperature (Tp)	See Table2
Time within 5°C of actual Peak Temperature (tp) <sup>2</sup>	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max

Table 1

Package Thickness	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350 - 2000	Volume mm <sup>3</sup> >2000
< 1.6mm	260°C	260°C	260°C
1.6mm - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Table 2

1. The above profiles are based on IPC/JEDEC J-STD-020C.
2. Exceeding these conditions may cause lowered product reliability.