

PCDR Series — SMD Shielded Power Inductor

Features

- Compact, low profile with low RDC and high current
- Provides magnetic shielding against radiation
- Flat bottom provides reliable surface mounting
- For Inductance values outside those listed in the datasheet contact factory
- Find Environmental information and Packaging specs in related supplemental documents



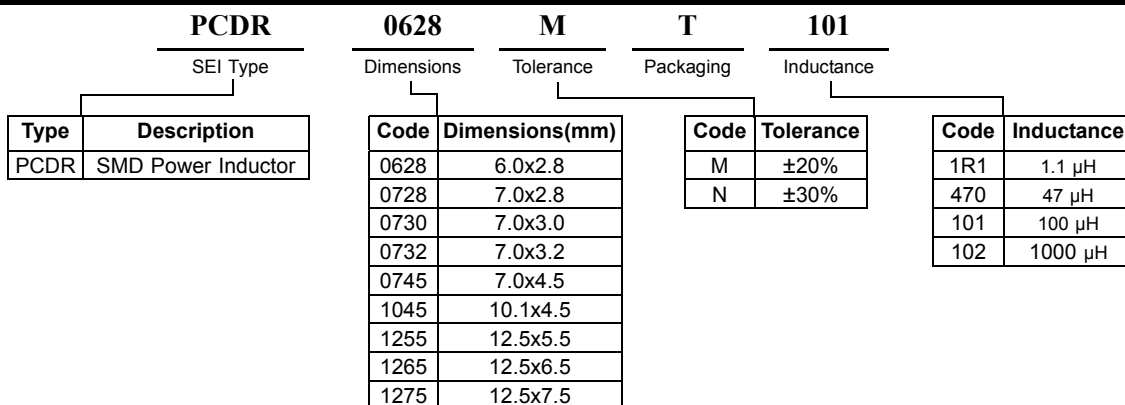
Applications

- Portable telephones
- Personal Computers
- GPS and PDAs
- DC/DC converters

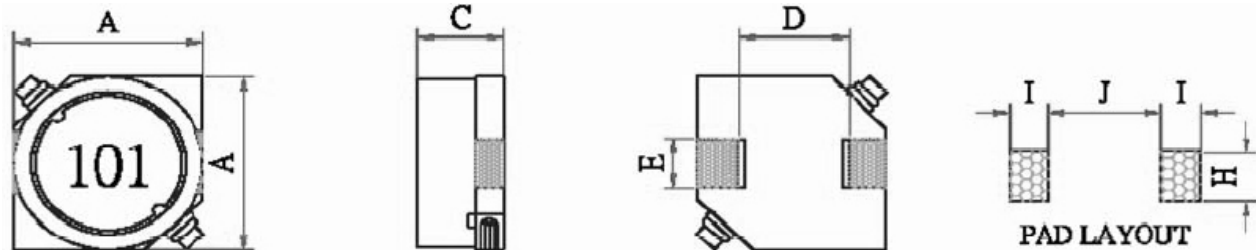
Inductance and Current ranges

- PCDR0628 4.7 ~ 100 μ H 1.6 ~ 0.42 A
- PCDR0728 3.3 ~ 47 μ H 1.6 ~ 0.54 A
- PCDR0730 3.3 ~ 100 μ H 1.8 ~ 0.35 A
- PCDR0732 3.3 ~ 1000 μ H 1.9 ~ 0.13 A
- PCDR0745 3.3 ~ 1000 μ H 2.3 ~ 0.14 A
- PCDR1045 10 ~ 1500 μ H 2.5 ~ 0.22 A
- PCDR1255 6.0 ~ 1500 μ H 3.6 ~ 0.29 A
- PCDR1265 2.0 ~ 150 μ H 6.2 ~ 1.00 A
- PCDR1275 1.2 ~ 220 μ H 8.2 ~ 1.30 A

How to Order



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Mechanical Specifications

Type /Code	A	C	D	E	H	I	J	Units
PCDR0628	0.236 ± 0.008 6.0 ± 0.2	0.110 ± 0.008 2.8 ± 0.2	0.157 4.0	0.079 2.0	0.087 2.2	0.059 1.5	0.157 4.0	inches mm
PCDR0728	0.276 ± 0.008 7.0 ± 0.2	0.110 ± 0.008 2.8 ± 0.2	0.157 4.0	0.079 2.0	0.087 2.2	0.059 1.5	0.157 4.0	inches mm
PCDR0730	0.276 ± 0.008 7.0 ± 0.2	0.118 ± 0.008 3.0 ± 0.2	0.157 4.0	0.079 2.0	0.087 2.2	0.059 1.5	0.157 4.0	inches mm
PCDR0732	0.276 ± 0.008 7.0 ± 0.2	0.276 ± 0.008 3.2 ± 0.2	0.157 4.0	0.079 2.0	0.087 2.2	0.059 1.5	0.157 4.0	inches mm
PCDR0745	0.276 ± 0.008 7.0 ± 0.2	0.276 ± 0.012 4.5 ± 0.3	0.157 4.0	0.079 2.0	0.087 2.2	0.059 1.5	0.157 4.0	inches mm
PCDR1045	0.276 ± 0.012 10.1 ± 0.3	0.276 ± 0.012 4.5 ± 0.3	0.236 6.0	0.118 3.0	0.126 3.2	0.098 2.5	0.220 5.6	inches mm
PCDR1255	0.492 ± 0.012 12.5 ± 0.3	0.276 ± 0.012 5.5 ± 0.3	0.339 8.6	0.118 3.0	0.126 3.2	0.098 2.5	0.339 8.6	inches mm
PCDR1265	0.492 ± 0.012 12.5 ± 0.3	0.276 ± 0.012 6.5 ± 0.3	0.339 8.6	0.118 3.0	0.126 3.2	0.098 2.5	0.339 8.6	inches mm
PCDR1275	0.492 ± 0.012 12.5 ± 0.3	0.276 ± 0.012 7.5 ± 0.3	0.339 8.6	0.118 3.0	0.126 3.2	0.098 2.5	0.339 8.6	inches mm

Electrical Characteristics - PCDR0628

Part Number	L (µH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0628MT4R7	4.7	1 KHz	20	0.036	1.60	2.50
PCDR0628MT6R8	6.8	1 KHz	20	0.052	1.50	2.20
PCDR0628MT100	10	1 KHz	20	0.068	1.30	1.80
PCDR0628MT150	15	1 KHz	20	0.100	1.00	1.40
PCDR0628MT220	22	1 KHz	20	0.120	0.77	1.30
PCDR0628MT330	33	1 KHz	20	0.180	0.69	1.10
PCDR0628MT470	47	1 KHz	20	0.270	0.59	0.92
PCDR0628MT680	68	1 KHz	20	0.390	0.50	0.78
PCDR0628MT101	100	1 KHz	20	0.620	0.42	0.64

Electrical Characteristics - PCDR0728

Part Number	L (µH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0728MT3R3	3.3	1 KHz	20	0.037	1.60	1.60
PCDR0728MT4R7	4.7	1 KHz	20	0.045	1.50	1.50
PCDR0728MT6R8	6.8	1 KHz	20	0.059	1.30	1.30
PCDR0728MT100	10	1 KHz	20	0.083	1.10	1.10
PCDR0728MT150	15	1 KHz	20	0.130	0.88	0.88

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Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0728MT220	22	1 KHz	20	0.180	0.75	0.75
PCDR0728MT330	33	1 KHz	20	0.240	0.65	0.65
PCDR0728MT470	47	1 KHz	20	0.340	0.54	0.54

Electrical Characteristics - PCDR0730

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0730MT3R3	3.3	1 KHz	20	0.023	1.80	1.80
PCDR0730MT4R7	4.7	1 KHz	20	0.036	1.60	1.60
PCDR0730MT6R8	6.8	1 KHz	20	0.041	1.50	1.50
PCDR0730MT100	10	1 KHz	20	0.053	1.30	1.30
PCDR0730MT150	15	1 KHz	20	0.084	1.00	1.00
PCDR0730MT220	22	1 KHz	20	0.110	0.86	0.86
PCDR0730MT330	33	1 KHz	20	0.160	0.65	0.65
PCDR0730MT470	47	1 KHz	20	0.240	0.57	0.57
PCDR0730MT680	68	1 KHz	20	0.310	0.49	0.49
PCDR0730MT101	100	1 KHz	20	0.450	0.35	0.35

Electrical Characteristics - PCDR0732

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0732MT3R3	3.3	1 KHz	20	0.023	1.90	1.90
PCDR0732MT4R7	4.7	1 KHz	20	0.036	1.70	1.70
PCDR0732MT6R8	6.8	1 KHz	20	0.041	1.60	1.60
PCDR0732MT100	10	1 KHz	20	0.053	1.40	1.40
PCDR0732MT150	15	1 KHz	20	0.075	1.10	1.10
PCDR0732MT220	22	1 KHz	20	0.110	0.96	0.96
PCDR0732MT330	33	1 KHz	20	0.160	0.75	0.75
PCDR0732MT470	47	1 KHz	20	0.240	0.67	0.67
PCDR0732MT680	68	1 KHz	20	0.310	0.59	0.59
PCDR0732MT101	100	1 KHz	20	0.450	0.45	0.45
PCDR0732MT151	150	1 KHz	20	0.650	0.37	0.37
PCDR0732MT221	220	1 KHz	20	1.050	0.29	0.29
PCDR0732MT331	330	1 KHz	20	1.670	0.22	0.22
PCDR0732MT471	470	1 KHz	20	2.050	0.20	0.20
PCDR0732MT681	680	1 KHz	20	3.150	0.16	0.16
PCDR0732MT102	1000	1 KHz	20	4.780	0.13	0.13

Electrical Characteristics - PCDR0745

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0745MT3R3	3.3	1 KHz	20	0.020	2.50	2.30
PCDR0745MT4R7	4.7	1 KHz	20	0.030	2.00	2.10
PCDR0745MT6R8	6.8	1 KHz	20	0.039	1.70	1.74

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Electrical Characteristics - PCDR0745

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR0745MT100	10	1 KHz	20	0.036	1.30	1.78
PCDR0745MT150	15	1 KHz	20	0.052	1.10	1.53
PCDR0745MT220	22	1 KHz	20	0.061	0.90	1.34
PCDR0745MT330	33	1 KHz	20	0.096	0.82	1.09
PCDR0745MT470	47	1 KHz	20	0.125	0.75	0.92
PCDR0745MT680	68	1 KHz	20	0.175	0.60	0.77
PCDR0745MT101	100	1 KHz	20	0.250	0.50	0.65
PCDR0745MT151	150	1 KHz	20	0.340	0.40	0.55
PCDR0745MT221	220	1 KHz	20	0.520	0.33	0.45
PCDR0745MT331	330	1 KHz	20	0.740	0.25	0.37
PCDR0745MT471	470	1 KHz	20	1.050	0.22	0.31
PCDR0745MT681	680	1 KHz	20	1.480	0.20	0.27
PCDR0745MT102	1000	1 KHz	20	2.280	0.14	0.25

Electrical Characteristics - PCDR1045

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (Ω) Max	I sat (A) Max	I rms (A) Max
PCDR1045MT100	10	1 KHz	20	0.036	3.00	2.50
PCDR1045MT150	15	1 KHz	20	0.047	2.40	2.20
PCDR1045MT220	22	1 KHz	20	0.059	2.10	1.90
PCDR1045MT330	33	1 KHz	20	0.082	1.60	1.70
PCDR1045MT470	47	1 KHz	20	0.100	1.40	1.50
PCDR1045MT680	68	1 KHz	20	0.140	1.20	1.30
PCDR1045MT101	100	1 KHz	20	0.200	1.00	1.10
PCDR1045MT151	150	1 KHz	20	0.350	0.79	0.81
PCDR1045MT221	220	1 KHz	20	0.470	0.65	0.70
PCDR1045MT331	330	1 KHz	20	0.680	0.54	0.58
PCDR1045MT471	470	1 KHz	20	1.030	0.47	0.47
PCDR1045MT681	680	1 KHz	20	1.600	0.38	0.38
PCDR1045MT102	1000	1 KHz	20	2.800	0.32	0.29
PCDR1045MT152	1500	1 KHz	20	3.400	0.22	0.26

Electrical Characteristics - PCDR1255

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (mΩ) Max	I sat (A) Max	I rms (A) Max
PCDR1255NT6R0	6.0	1 KHz	30	16.4	3.60	4.90
PCDR1255MT100	10	1 KHz	20	21.5	3.40	4.30
PCDR1255MT150	15	1 KHz	20	25.9	2.80	3.90
PCDR1255MT220	22	1 KHz	20	33.8	2.30	3.40
PCDR1255MT330	33	1 KHz	20	41.5	1.90	3.10
PCDR1255MT470	47	1 KHz	20	61.8	1.60	2.50
PCDR1255MT680	68	1 KHz	20	83.2	1.30	2.20
PCDR1255MT101	100	1 KHz	20	117	1.10	1.80

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Electrical Characteristics - PCDR1255

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (mΩ) Max	I sat (A) Max	I rms (A) Max
PCDR1255MT151	150	1 KHz	20	190	0.88	1.40
PCDR1255MT221	220	1 KHz	20	270	0.72	1.20
PCDR1255MT331	330	1 KHz	20	410	0.59	1.00
PCDR1255MT471	470	1 KHz	20	520	0.49	0.88
PCDR1255MT681	680	1 KHz	20	760	0.43	0.73
PCDR1255MT102	1000	1 KHz	20	1120	0.34	0.60
PCDR1255MT152	1500	1 KHz	20	1730	0.29	0.48

Electrical Characteristics - PCDR1265

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (mΩ) Max	I sat (A) Max	I rms (A) Max
PCDR1265NT2R0	2.0	1 KHz	30	11.7	10.0	6.2
PCDR1265NT4R2	4.2	1 KHz	30	15.0	7.3	5.5
PCDR1265MT7R0	7.0	1 KHz	20	17.7	5.7	5.0
PCDR1265MT100	10	1 KHz	20	20.2	5.0	4.8
PCDR1265MT150	15	1 KHz	20	23.7	4.2	4.4
PCDR1265MT220	22	1 KHz	20	31.6	3.5	3.8
PCDR1265MT330	33	1 KHz	20	40.6	2.8	3.4
PCDR1265MT470	47	1 KHz	20	57.8	2.4	2.8
PCDR1265MT680	68	1 KHz	20	78.7	2.0	2.4
PCDR1265MT101	100	1 KHz	20	123	1.6	1.9
PCDR1265MT151	150	1 KHz	20	273	1.0	1.2

Electrical Characteristics - PCDR1275

Part Number	L (μH)	Test Freq (Hz)	Tolerance (%)	DCR (mΩ) Max	I sat (A) Max	I rms (A) Max
PCDR1275NT1R2	1.2	1 KHz	30	6.9	13.0	8.2
PCDR1275NT2R7	2.7	1 KHz	30	9.4	10.0	7.0
PCDR1275NT3R9	3.9	1 KHz	30	10.4	9.0	6.7
PCDR1275NT5R6	5.6	1 KHz	30	11.6	7.8	6.3
PCDR1275NT6T8	6.8	1 KHz	30	13.1	7.2	5.9
PCDR1275MT100	10	1 KHz	20	15.6	5.5	5.4
PCDR1275MT150	15	1 KHz	20	18.4	4.7	5.0
PCDR1275MT220	22	1 KHz	20	26.3	4.0	4.0
PCDR1275MT330	33	1 KHz	20	39.5	3.2	3.4
PCDR1275MT470	47	1 KHz	20	52.8	2.7	3.0
PCDR1275MT680	68	1 KHz	20	77.8	2.0	2.4
PCDR1275MT101	100	1 KHz	20	125	1.9	1.9
PCDR1275MT151	150	1 KHz	20	175	1.5	1.6
PCDR1275MT221	220	1 KHz	20	258	1.3	1.3