

Cat. No.	Case Size	Type	(μ F)	Tol	Net Price*
50 VDC					
NMC0603NPO220J50TRPF	0603	NPO	22pF	$\pm 5\%$	\$10.91
NMC0603NPO330J50TRPF	0603	NPO	33pF	$\pm 5\%$	10.91
NMC0603NPO470J50TRPF	0603	NPO	47pF	$\pm 5\%$	10.91
NMC0603NPO101J50TRPF	0603	NPO	100pF	$\pm 5\%$	10.91
NMC0603NPO221J50TRPF	0603	NPO	220pF	$\pm 5\%$	15.28
NMC0603NPO471J50TRPF	0603	NPO	470pF	$\pm 5\%$	26.19
NMC0603X7R102K50TRPF	0603	X7R	1000pF	$\pm 10\%$	10.04
NMC0603NPO102J50TRPF	0603	NPO	1000pF	$\pm 5\%$	32.73
NMC0603X7R472K50TRPF	0603	X7R	4700pF	$\pm 10\%$	13.09
NMC0603X7R103K50TRPF	0603	X7R	.01 μ F	$\pm 10\%$	10.04
NMC0805NPO101J50TRPF	0805	NPO	100pF	$\pm 5\%$	17.46
NMC0805X7R102K50TRPF	0805	X7R	1000pF	$\pm 10\%$	17.46
NMC0805NPO102J50TRPF	0805	NPO	1000pF	$\pm 5\%$	39.28
NMC0805X7R103K50TRPF	0805	X7R	.01 μ F	$\pm 10\%$	17.46
NMC0805X7R104K50TRPF	0805	X7R	.1 μ F	$\pm 10\%$	21.82
NMC1206X7R103K50TRPF	1206	X7R	.01 μ F	$\pm 10\%$	39.28
NMC1206X7R104K50TRPF	1206	X7R	.1 μ F	$\pm 10\%$	39.28

*Net Price per 1000.

NIC THIN FILM SMT RESISTORS

FEATURES: Precise tolerance and temperature coefficient. EIA standard case sizes 0402-2512. Low noise. Reflow solderable (Pb free termination finish). Sold in reels: 0402 = 10000 and 0603 to 1206 = 5000. **SPECIFICATIONS: Tolerance:** T = .01%, A = .05%, B = .1%, C = .25%, D = .5%, F = 1%. **TC:** S = 5PPM, B = 10PPM, N = 15PPM, C = 25PPM, D = 50PPM. Resistance values based on E24/E96 Decade Values.

Cat. No.	Case Size	Wattage	Res. Range	TC (PPM)	Net Price Per 1000
TOLERANCE: $\pm 1\%$					
NTR04BXXXCTRF	0402	1/16	10-100K	25	\$897.83
NTR06BXXXCTRF	0603	1/16	4.7-332K	25	748.19
NTR10BXXXCTRF	0805	1/10	1.0-1.0M	25	847.95
NTR12BXXXCTRF	1206	1/8	1.0-1.0M	25	1067.42

NOTE: RoHS Compliant

NIC CURRENT SENSING RESISTORS

FEATURES: Precise tolerance and temperature coefficient. EIA standard case sizes 0402-2512. Reflow solderable (Pb free termination finish). Sold in reels: 0402 = 10000 and 0603 to 1206 = 5000. **SPECIFICATIONS: Tolerance:** J = 5%, F = 1%. **TC:** E = 100PPM, K = 150PPM, G = 300PPM, H = 400PPM, J = 600PPM.

Cat. No.	Case Size	Wattage	Res. Range	TC (PPM)
TOLERANCE: 1%, 5%				
NCST04XRESYTRF	0402	1/16	0.051 to 1R	200-400
NCST06XRESYTRF	0603	1/10	0.02 to 1R	200-600
NCST10TXRESYTRF	0805	1/8	0.02 to 1R	200-600
NCST12XRESYTRF	1206	1/4	0.01 to 1R	100-600
NCST50XRESYTRF	2010	1/2	0.01 to 1R	100-600
NCST100XRESYTRF	2512	1.0	0.01 to 1R	100-600
NCST100XRESYTRF	2512	1.0	.005 to .01	50-150

NOTE: RoHS Compliant. X = Tolerance (F or J), RES = Resistance, Y = TC Code. For a full listing of resistance values please refer to the Electro Sonic Web-site www.e-sonic.com or contact your sales representative.

NIC FERRITE CHIP BEADS

FEATURES: Rugged construction in standard EIA sizes. Effective EMC/RFI suppression up to 1 GHz. Current ratings up to 500mA. High impedance over a wide frequency range. Flow and reflow soldering applications. **Operating temperature range:** -40°C to +125°C. Sold in full reels.

Cat. No.	Case Size	Impedance Range @ 100MHz	Tol. Range	Net Price Per 1000
NCB0402PXXXTRF	0402	6.0-600	$\pm 25\%$	\$39.28
NCB0603RXXXTRF	0603	30-1500	$\pm 25\%$	39.28
NCB0805AXXXTRF	0805	30-2200	$\pm 25\%$	34.92
NCB1206EXXXTRF	1206	19-2000	$\pm 25\%$	39.28
NCB1206EXXXTRF	1206	60-70	$\pm 25\%$	61.10
NCB1210CXXXTRF	1210	32-2000	$\pm 25\%$	56.74
NCB1806EXXXTRF	1806	60-150	$\pm 25\%$	99.76
NCB1812DXXXTRF	1812	70-120	$\pm 25\%$	139.66

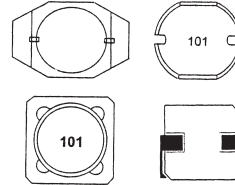
NOTE: RoHS Compliant. For current ratings please refer to the Electro Sonic Web-site www.e-sonic.com or contact your sales representative. High current NCB-H series also available.

NIC HIGH CURRENT FERRITE CHIP BEADS

FEATURES: Rugged construction in standard EIA sizes. Effective EMC/RFI suppression up to 1 GHz. Current rating up to 6A. High impedance over a wide frequency range. Flow and reflow soldering applications. **Operating temperature range:** -40°C to +125°C. Sold in full reels.

Cat. No.	Case Size	Impedance Range @ 100 MHz	Res. Range	Net Price
NCB-H0603RXXXTRF	0603	10-600	$\pm 25\%$	\$43.65
NCB-H0805AXXXTRF	0805	30-600	$\pm 25\%$	39.28
NCB-H1206BXXXTRF	1206	32-600	$\pm 25\%$	43.65
NCB-H1806EXXXTRF	1806	60-80	$\pm 25\%$	139.66
NCB-H1812DXXXTRF	1812	80-1300	$\pm 25\%$	139.66

NOTE: RoHS Compliant. For current ratings please refer to the Electro Sonic Web-site www.e-sonic.com or contact your sales representative.

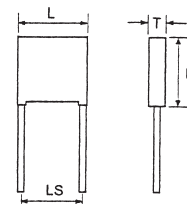


NIC SMT POWER INDUCTORS

NIC Components NPI and NPIS Series of surface mount power inductors offer the design engineer a wide selection of inductance values, current ratings and sizes.

Cat. No.	Inductance Range μ H	Dimensions L x W x H	Reel Size	Net Price
NPI32CXXXMTRF	1.0-470	3.5 x 3.0 x 2.1	3000	\$.19
NPI43CXXXMTRF	1.0-560	4.5 x 4.0 x 3.2	2000	.19
NPIS22CXXXMTRF	1.0-560	5.8 x 5.2 x 2.0	3000	.20
NPIS43CXXXMTRF	10-220	5.8 x 5.2 x 4.5	1500	.20
NPI73CXXXMTRF	10-330	7.8 x 7.0 x 3.5	1000	.23
NPI75CXXXMTRF	10-475	7.8 x 7.0 x 5.0	1000	.23
NPI104CXXXMTRF	10-560	10.0 x 9.0 x 4.0	800	.26
NPI105CXXXMTRF	10-820	10.0 x 9.0 x 5.4	800	.26
NPI17LXXXMTRF	1.2-330	5.5 x 6.6 x 1.2	1000	.26
NPI31PXXXMTRF	0.33-10	13.5 x 9.91 x 6.35	600	.40
NPIS2PXXXMTRF	0.78-15	22.35 x 16.25 x 8.0	250	.54
NPI16WXXXMTRF	1.0-1000	4.45 x 6.6 x 2.92	2500	.65
NPI22WXXXMTRF	3.3-330	8.0 x 10.5 x 5.0	1000	.58
NPIS0WXXXMTRF	10-1000	10.0 x 12.7 x 3.0	1000	.43
NPI31WXXXMTRF	1.0-1000	10.0 x 12.7 x 5.0	500	.40
NPIS4WXXXMTRF	10-1000	10.0 x 12.7 x 11.0	225	.54
NPIS2WXXXMTRF	1.0-1000	15.0 x 18.4 x 7.0	250	.72
NPIS42DXXXMTRF	10-180	4.8 x 4.8 x 2.0	4000	.43
NPIS43DXXXMTRF	1.2-180	4.8 x 4.8 x 3.0	2500	.43
NPIS52DXXXMTRF	4.1-100	6.5 x 6.5 x 2.0	4000	.47
NPIS53DXXXMTRF	2.6-100	5.6 x 5.6 x 3.0	2500	.47
NPIS63DXXXMTRF	3.0-100	6.6 x 6.6 x 3.0	1500	.54
NPIS64DXXXMTRF	3.3-100	6.6 x 6.6 x 4.0	1000	.54
NPIS24HXXXMTRF	3.3-330	12.5 x 12.5 x 5.0	600	.43
NPIS25HXXXMTRF	1.5-1000	12.5 x 12.5 x 8.0	400	.43
NPIS27HXXXMTRF	1.2-1000	12.5 x 12.5 x 8.0	400	.43
NPIS23PXXXMTRF	0.1-10	13.6 x 12.9 x 3.5	600	.72
NPIS16RXXXMTRF	1.0-10000	4.45 x 6.6 x 2.92	2500	.89
NPIS22RXXXMTRF	2.2-1000	8.0 x 10.5 x 5.0	1000	.72
NPIS30RXXXMTRF	2.2-470	10.0 x 12.7 x 3.0	1000	.65
NPIS31RXXXMTRF	1.0-390	10.0 x 12.7 x 5.0	500	.58
NPIS52RXXXMTRF	10-1000	15.0 x 18.4 x 7.0	250	.86

NOTE: RoHS Compliant. Replace XXX in Cat. No. with inductor value.

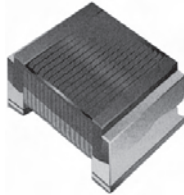


NIC X2 NPX SERIES FILM CAPACITORS

FEATURES: UL, CSA, VDE, SEMKO, NEMKO, DEMKO, FEMKO and CE Approvals for across the line applications. Non-inductive and self-healing construction. **SPECIFICATIONS: Voltage:** 275 VAC. **Tolerance:** $\pm 10\%$. **Operating temperature range:** -40°C to +100°C. **Dielectric strength:** 2000VDC for 1 second.

Cat. No.	Capacitance (μ F)	Dimensions (mm) L x T x H x LS	Net Price
NPX104K275VX2F	0.1	18 x 6 x 12 x 15	\$.24
NPX224K275VX2F	0.22	26.5 x 7.0 x 16.5 x 22.5	.43
NPX474K275VX2F	0.47	32.0 x 11.0 x 20.0 x 27.5	.83
NPX105K275VX2F	1.0	32.5 x 16.0 x 25.0 x 27.5	1.26

NOTE: RoHS Compliant



BOURNS CW SERIES HI-Q WIREWOUND CHIP INDUCTORS

FEATURES: Wirewound, open construction. Alumina core material. Operating temperature: -40°C to +125°C. **Cross-Ref:** Coilcraft 0603CS, 0805CS, 1008CS.

Cat. No.	Ind. (nH)	Q (Min.)	SRF Min. MHz	RDC Max. (Ohms)	I Rms (mA)	Net Price
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EIA SIZE 0603, TOLERANCE: ±5%

⊗ CW160808-10NJ	10	30	4800	0.13	700	\$.30
⊗ CW160808-22NJ	22	35	3000	0.19	700	.30
⊗ CW160808-33NJ	33	35	2300	0.22	600	.30
⊗ CW160808-47NJ	47	35	2100	0.28	600	.30
⊗ CW160808-R10J	100	34	1400	0.71	400	.30
⊗ CW160808-R22J	220	25	990	1.9	200	.30

EIA SIZE 0805, TOLERANCE: ±5%

⊗ CW201212-10NJ	10	60	4800	0.08	600	.30
⊗ CW201212-22NJ	22	60	3300	0.1	600	.30
⊗ CW201212-33NJ	33	60	2400	0.15	500	.30
⊗ CW201212-47NJ	47	60	1700	0.15	500	.30
⊗ CW201212-R10J	100	60	1200	0.43	400	.30
⊗ CW201212-R22J	2200	50	860	1.1	300	.30
⊗ CW201212-R33J	3300	45	800	1.65	200	.30
⊗ CW201212-R47J	4700	33	375	1.72	250	.30

EIA SIZE 1008, TOLERANCE: J=±5%, K=±10%

⊗ CW252016-10NK	10	50	4300	0.08	600	.30
⊗ CW252016-22NK	22	60	2500	0.1	600	.30
⊗ CW252016-33NK	33	60	1700	0.1	600	.30
⊗ CW252016-47NK	47	60	1500	0.1	600	.30
⊗ CW252016-R10J	100	60	1000	0.18	500	.30
⊗ CW252016-R22J	220	45	700	1.45	500	.30
⊗ CW252016-R33J	330	45	570	0.9	500	.30
⊗ CW252016-R47J	470	45	450	1.19	470	.30
⊗ CW252016-R68J	680	45	375	1.47	400	.30
⊗ CW252016-1R0J	1000	25	290	1.75	330	.30
⊗ CW252016-2R2J	2200	25	160	2.8	290	.30
⊗ CW252016-3R3J	3300	25	110	1.9	185	.30
⊗ CW252016-4R7J	4700	25	90	2.3	175	.30



BOURNS CI SERIES MULTI-LAYER CHIP INDUCTORS

FEATURES: Ceramic base, nickel barrier termination. Operating temperature: -55°C to +125°C. **Cross-Ref:** TOKO LL1608, LL2012.

Cat. No.	Ind. (nH)	Q (Min.)	SRF Min. MHz	RDC Max. (Ohms)	I Rms (mA)	Net Price
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EIA SIZE 0603, TOLERANCE: D=±.3NH, J=±5%

⊗ CI160808-1N0D	1.0	8	4000	0.1	300	\$.06
⊗ CI160808-2N2D	2.2	8	3600	0.16	300	.06
⊗ CI160808-3N3D	3.3	10	3200	0.22	300	.06
⊗ CI160808-4N7D	4.7	10	2800	0.28	300	.06
⊗ CI160808-10NJ	10	10	1800	0.35	300	.06
⊗ CI160808-22NJ	22	10	1100	0.55	300	.06
⊗ CI160808-33NJ	33	10	1000	0.65	300	.06
⊗ CI160808-47NJ	47	10	800	0.9	300	.06
⊗ CI160808-R10J	100	10	500	1.7	300	.06
⊗ CI160808-R22J	220	8	350	2.8	200	.06

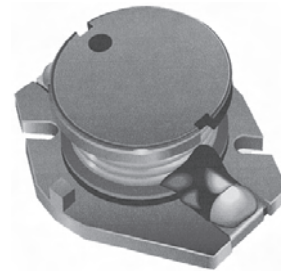
Cat. No.	Ind. (nH)	Q (Min.)	SRF Min. MHz	RDC Max. (Ohms)	I Rms (mA)	Net Price
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EIA SIZE 0603, TOLERANCE: D=±.3NH, J=±5%

⊗ CI201210-1N0D	1.0	10	4000	0.1	300	\$.10
⊗ CI201210-2N2D	2.2	10	3800	0.1	300	.10
⊗ CI201210-3N3D	3.3	10	3400	0.13	300	.10
⊗ CI201210-4N7D	4.7	10	3000	0.2	300	.10
⊗ CI201210-10NJ	10	10	1800	0.3	300	.10
⊗ CI201210-22NJ	22	15	1100	0.5	300	.10
⊗ CI201210-33NJ	33	15	1000	0.6	300	.10
⊗ CI201210-47NJ	47	15	850	0.7	300	.10
⊗ CI201210-R10J	100	15	500	1	300	.10
⊗ CI201210-R22J	220	10	330	2	250	.10
⊗ CI201210-R33J	330	10	270	3	250	.10
⊗ CI201210-R47J	470	10	180	4	250	.10



SDR0703



SDR1005

BOURNS SDR0703 AND SDR1005 SERIES SMD POWER INDUCTORS

FEATURES: Ferrite core material, low profile of 2.7 mm for SDR0703 and 5.0 mm for SDR1005. Operating temperature: -40°C to +125°C. **Cross-ref:** Coilcraft DO1608C, D03316P.

Cat. No.	Ind. uH	Q (Min.)	SRF Min. MHz	RDC Max. (Ohms)	I Rms (A)	Net Price
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SDR0703 TOLERANCE: M=±20%, K=±10%

⊗ SDR0703-1R0M	1	25	160	0.042	2.2	\$.56
⊗ SDR0703-2R2M	2.2	24	95	0.06	1.8	.56
⊗ SDR0703-3R3M	3.3	23	65	0.075	1.65	.56
⊗ SDR0703-4R7K	4.7	20	60	0.1	1.5	.56
⊗ SDR0703-100K	10	23	36	0.17	1	.56
⊗ SDR0703-220K	22	20	26	0.3	0.65	.56
⊗ SDR0703-330K	33	17	20	0.45	0.56	.56
⊗ SDR0703-470K	47	20	15	0.72	0.4	.56
⊗ SDR0703-101K	100	33	11	1.56	0.27	.56
⊗ SDR0703-221K	220	31	7	3	0.18	.56
⊗ SDR0703-331K	330	33	6	4.8	0.16	.56
⊗ SDR0703-471K	470	33	5	7	0.13	.56
⊗ SDR0703-102K	1000	30	3.2	14.2	0.08	.56

SDR1005 TOLERANCE: M=±20%, K=±10%

⊗ SDR1005-1R0M	1	20	137	0.007	7.5	.64
⊗ SDR1005-4R7M	4.7	50	42	0.019	4.5	.64
⊗ SDR1005-220M	22	40	18	0.1	2	.64
⊗ SDR1005-330K	33	25	14	0.12	1.8	.64
⊗ SDR1005-470K	47	25	12	0.19	1.4	.64
⊗ SDR1005-101K	100	30	8	0.33	1	.64
⊗ SDR1005-221K	220	33	5	0.78	0.7	.64
⊗ SDR1005-331K	330	33	4	1.15	0.55	.64
⊗ SDR1005-471K	470	57	4	1.7	0.45	.64
⊗ SDR1005-102K	1000	81	2	3.9	0.3	.64
⊗ SDR1005-222K	2200	91	2	8.2	0.2	.64
⊗ SDR1005-332K	3300	93	1	14	0.16	.64
⊗ SDR1005-472K	4700	93	1	17	0.15	.64
⊗ SDR1005-103K	10000	101	1	39	0.1	.64