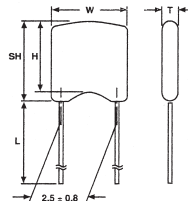


BC COMPONENTS TYPE HV HIGH VOLTAGE DISC CAPACITORS

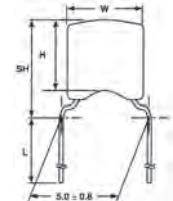
FEATURES: Low losses, high stability, high capacitance in small size, kinked (preferred) or straight leads. Capacitors consist of a ceramic disc both sides of which are silver-plated. Connection leads are made of tinned copper having a diameter of 0.6mm or 0.8mm up to 3kV and 0.8mm for 6kV. Application for 500V ceramic disc: bypassing, coupling, resonant circuit. Application for 1kV-6kV ceramic disc: DC high voltage, pulse high voltage, SMPS, HV power supply, HF ballast. **SPECIFICATIONS:** Operating temperature: Class 1 SL0//C0G -55 to +125°C; Class 2 X7R -55 to +125°C; Class 2 Y5P; Y5V -30 to +85°C.

Cat. No.	TC	Tol	Voltage	Cap. (pF)	D (mm)	F (mm)	Net Price*
D100G20C0GH63J5R	C0G	±2%	100	10	5.0	5.0	\$85.29
D150G20C0GH63J5R	C0G	±2%	100	15	5.0	5.0	85.29
D220G20C0GH63J5R	C0G	±2%	100	22	5.0	5.0	85.29
D270G20C0GH63J5R	C0G	±2%	100	27	5.0	5.0	85.29
D330G20C0GH63J5R	C0G	±2%	100	33	5.0	5.0	85.29
D470G25C0GH63J5R	C0G	±2%	100	47	6.5	5.0	105.50
D101G29C0GH63J5R	C0G	±2%	100	100	7.5	5.0	149.64
D221G43C0GH63J5R	C0G	±2%	100	220	11.0	5.0	243.16
D331G39P3KH63J5R	N1500	±2%	100	330	10.0	5.0	215.85
D471G43P3KH63J5R	N1500	±2%	100	470	11.0	5.0	243.16
S100J25SL0N63J5R	SLO	±5%	1000	10	6.5	5.0	56.49
S220J25SL0N63J5R	SLO	±5%	1000	22	6.5	5.0	56.49
S270J25SL0N63J5R	SLO	±5%	1000	27	6.5	5.0	56.49
S330J25SL0N63J5R	SLO	±5%	1000	33	6.5	5.0	56.49
S470J25SL0N63J5R	SLO	±5%	1000	47	6.5	5.0	56.49
S101J29SL0N63J5R	SLO	±5%	1000	100	7.5	5.0	68.83
S221K25Y5PN63J5R	Y5P	±10%	1000	220	6.5	5.0	52.37
S331K25Y5PN63J5R	Y5P	±10%	1000	330	6.5	5.0	52.37
S471K25Y5PN63J5R	Y5P	±10%	1000	470	6.5	5.0	52.37
S681K29Y5PN63J5R	Y5P	±10%	1000	680	7.5	5.0	61.73
S102K29Y5PN63J5R	Y5P	±10%	1000	1000	7.5	5.0	61.73
S222M29Z5UN63J5R	Z5U	±20%	1000	2200	6.5	5.0	65.09
S332M33Z5UN63J5R	Z5U	±20%	1000	3300	8.5	5.0	149.64
S472M39Z5UN63J5R	Z5U	±20%	1000	4700	10.0	5.0	96.52
S682M43Z5UN63J5R	Z5U	±20%	1000	6800	11.0	5.0	160.86
S103M47Z5UN63J7R	Z5U	±20%	1000	10000	12.0	7.5	120.09
S101K25Y5PP63K5R	Y5P	±10%	2000	100	6.5	5.0	62.85
S221K25Y5PP63K5R	Y5P	±10%	2000	220	6.5	5.0	62.85
S471K29Y5PP63K5R	Y5P	±10%	2000	470	7.5	5.0	83.80
S102K33Y5PP63K5R	Y5P	±10%	2000	1000	8.5	5.0	89.04
S222K43Y5PP63K5R	Y5P	±10%	2000	2200	11.0	5.0	156.00
S103M69Z5UP63K7R	Z5U	±20%	2000	10000	17.5	7.5	242.41
S101K33Y5PR63K7R	Y5P	±10%	3000	100	8.5	7.5	110.36
S221K33Y5PR63K7R	Y5P	±10%	3000	220	8.5	7.5	110.36
S471K33Y5PR63K7R	Y5P	±10%	3000	470	8.5	7.5	110.36
S102K43Y5PR63K7R	Y5P	±10%	3000	1000	11.0	7.5	155.25
S222K59Y5PR63K7R	Y5P	±10%	3000	2200	15.0	7.5	247.65
S102M59Z5U083LOR	Z5U	±20%	6000	1000	15.0	10.0	520.37
S222M75Z5U083LOR	Z5U	±20%	6000	2200	19.0	10.0	792.33

*Net Price per 1000.



L2



H5

BC COMPONENTS MONO-KAP RADIAL CERAMIC CAPACITORS

BC Components Mono-Kap product line provides a wide range of conformally coated multi-layer ceramic capacitors in three dielectrics-C0G Ultra Stable; X7R Stable and Y5V General Purpose. The capacitors are fired through a high temperature profile to mature the ceramic and metal into a homogenous unit. Encapsulation consists of moisture-resistant conformal epoxy coating that meets the flame requirements of UL94V-0. Operating Temperature: -55°C to +125°C for C0G and X7R type; -55°C to +85°C for Z5U type.

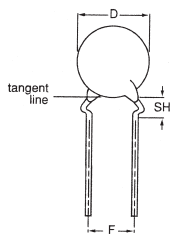
SIZE CHART

Size Code	Max. Width	Max. Height	Max. Thickness	Max. Seating Height (SH)	
				L2	H5
15	4.0 (0.15)	4.0 (0.15)	25 (0.100)	5.58 (0.220)	6.50 (0.256)
20	5.0 (0.20)	5.0 (0.20)	3.2 (0.13)	6.58 (0.259)	7.50 (0.295)

Cat. No.	Dielectric	VDC	Cap (pF)	Size Code	L.S. (mm)	Net Price*
K100J15C0GF53L2	C0G	50	10	15	2.5	\$60.60
K150J15C0GF53L2	C0G	50	15	15	2.5	60.60
K180J15C0GF53L2	C0G	50	18	15	2.5	60.60
K220J15C0GF53L2	C0G	50	22	15	2.5	60.60
K270J15C0GF53L2	C0G	50	27	15	2.5	60.60
K330J15C0GF53L2	C0G	50	33	15	2.5	60.60
K390J15C0GF53L2	C0G	50	39	15	2.5	60.60
K470J15C0GF53L2	C0G	50	47	15	2.5	60.60
K560J15C0GF53L2	C0G	50	56	15	2.5	60.60
K680J15C0GF53L2	C0G	50	68	15	2.5	60.60
K820J15C0GF53L2	C0G	50	82	15	2.5	60.60
K101J15C0GF53L2	C0G	50	100	15	2.5	60.60
K151J15C0GF53L2	C0G	50	150	15	2.5	72.95
K221J15C0GF53L2	C0G	50	220	15	2.5	72.95
K331J15C0GF53L2	C0G	50	330	15	2.5	89.78
K471J15C0GF53L2	C0G	50	470	15	2.5	89.78
K681J15C0GF53L2	C0G	50	680	15	2.5	109.98
K102J15C0GF53L2	C0G	50	1000	15	2.5	89.78
K222J15C0GF53L2	C0G	50	2200	15	2.5	185.55
K332J20C0GF53L2	C0G	50	3300	20	2.5	411.88
K100J15C0GH53L2	C0G	100	10	15	2.5	92.40
K220J15C0GH53L2	C0G	100	22	15	2.5	92.40
K330J15C0GH53L2	C0G	100	33	15	2.5	92.40
K470J15C0GH53L2	C0G	100	47	15	2.5	92.40
K101J15C0GH53L2	C0G	100	100	15	2.5	92.40
K221J15C0GH53L2	C0G	100	220	15	2.5	114.85
K471J15C0GH53L2	C0G	100	470	15	2.5	144.03
K102J20C0GH53L2	C0G	100	1000	20	2.5	226.33

Cat. No.	Dielectric	VDC	Cap (pF)	Size Code	L.S. (mm)	Net Price*
K221K15X7RF53L2	X7R	50	220	15	2.5	\$55.37
K471K15X7RF53L2	X7R	50	470	15	2.5	55.37
K102K15X7RF53L2	X7R	50	1000	15	2.5	55.37
K102K15X7RF53H5	X7R	50	1000	15	5.0	55.37
K152K15X7RF53L2	X7R	50	1500	15	2.5	55.74
K222K15X7RF53L2	X7R	50	2200	15	2.5	55.74
K332K15X7RF53L2	X7R	50	3300	15	2.5	55.74
K472K15X7RF53L2	X7R	50	4700	15	2.5	55.74
K682K15X7RF53L2	X7R	50	6800	15	2.5	55.74
K103K15X7RF53L2	X7R	50	0.01µF	15	2.5	55.37
K103K15X7RF53H5	X7R	50	0.01µF	15	5.0	19.66
K223K15X7RF53L2	X7R	50	0.022µF	15	2.5	62.47
K333K15X7RF53L2	X7R	50	0.033µF	15	2.5	66.59
K473K15X7RF53L2	X7R	50	0.047µF	15	2.5	66.22
K683K15X7RF53L2	X7R	50	0.068µF	15	2.5	94.65
K104K15X7RF53L2	X7R	50	0.1µF	15	2.5	64.35
K104K15X7RF53H5	X7R	50	0.1µF	15	5.0	64.35
K224K20X7RF53H5	X7R	50	0.22µF	20	5.0	184.43
K334K20X7RF53H5	X7R	50	0.33µF	20	5.0	389.06
K221K15X7RH53L2	X7R	100	220	15	2.5	62.47
K471K15X7RH53L2	X7R	100	470	15	2.5	62.47
K102K15X7RH53L2	X7R	100	1000	15	2.5	62.10
K332K15X7RH53L2	X7R	100	2200	15	2.5	66.22
K222K15X7RH53L2	X7R	100	3300	15	2.5	66.22
K472K15X7RH53L2	X7R	100	4700	15	2.5	66.22
K103K15X7RH53L2	X7R	100	0.01µF	15	2.5	80.06
K223K15X7RH53L2	X7R	100	0.022µF	15	2.5	120.09
K473K20X7RH53L2	X7R	100	0.047µF	20	2.5	171.71
K105Z20Y5VF53H5	Y5V	50	1µF	20	5.0	141.78
K105Z20Y5VF53L2	Y5V	50	1µF	20	2.5	141.78

*Net Price per 1000.

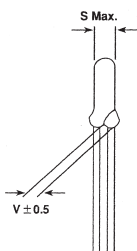
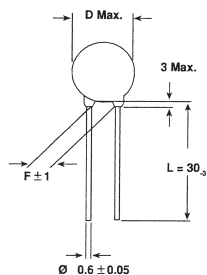


BC COMPONENTS SAFETY CERAMIC DISC CAPACITORS

SPECIFICATIONS: Disc radial leads. Climatic category: 25/125/56 or 25/85/21. Operating temperature: -30 to +125°C. Capacitance tolerance: 10%, 20%. Approvals: ENEC, UL, CSA.

Cat. No.	Cap. (pF)	Tol.	Dimensions mm (Max.)			Net Price*
			D	SH	F	
X1/Y1 440/250VAC DP SERIES						
S101K33Y5PQ63V0R	100	±10%	8.5	4.0	10	\$115.22
S221K33Y5PQ63V0R	220	±10%	8.5	4.0	10	115.22
S471K33Y5PQ63V0R	470	±10%	8.5	4.0	10	115.22
S102M33Y5UQ63V0R	1000	±20%	8.5	4.0	10	214.36
S222M43Y5UQ63V0R	2200	±20%	11.0	4.0	10	246.53
S472M63Y5UQ83V0R	4700	±20%	16.0	4.0	10	451.53
X1/X2 440/250VAC DN SERIES						
S100K25U2MS63K7R	10	±10%	5.6	4.0	5.0	90.53
S220K25U2MS63K7R	22	±10%	6.5	4.0	5.0	90.53
S470K29U2MS63K7R	47	±10%	7.5	4.0	5.0	97.64
S101M33Y5PS63K7R	100	±20%	8.5	4.0	7.5	160.86
S221M33Y5PS63K7R	220	±20%	8.5	4.0	7.5	160.86
S471M33Y5PS63K7R	470	±20%	8.5	4.0	7.5	160.86
S102M43Y5PS63K7R	1000	±20%	11.0	4.0	7.5	164.60
S102M29Y5US63K7R	1000	±20%	7.5	4.0	7.5	107.37
S222M39Y5US63K7R	2200	±20%	10.0	4.0	7.5	147.02
S472M53Y5US63K7R	4700	±20%	13.5	4.0	7.5	229.69
S103263Y5VS83K7R	10000	+80/-20%	16.0	4.0	7.5	335.19

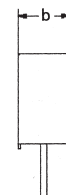
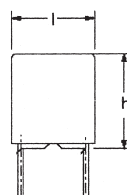
*Net Price per 1000.



DRALORIC SAFETY CERAMIC DISC CAPACITORS

SPECIFICATIONS: Disc radial leads. Climatic category: 40/125/21. Operating temperature: -40 to +125°C. Capacitance tolerance: 20%. Coating: epoxy dipped, flame retardant UL-Class 94 V-0. Approvals: ENEC, UL, CSA.

Cat. No.	Cap. (pF)	Tol.	Dimensions mm (Max.)			Net Price Per 100
			D	S	F	
WYO X1/Y2 440/274VAC SERIES						
WYO102MCMBF0KR	1000	±20%	6.5	4.5	5.0	\$5.42
WYO222MCMBF0KR	2200	±20%	9.0	4.5	5.0	12.00
WYO472MCMBF0KR	4700	±20%	12.0	4.5	7.5	13.20
WYO103MCMCF0KR	10000	±20%	21.0	4.5	7.5	34.23
WKO X1/Y2 440/300VAC SERIES						
WKO101MPCPF0KR	100	±20%	7.0	4.5	7.5	8.99
WKO471MPCPF0KR	470	±20%	7.0	4.5	7.5	8.99
WKO102MPCPF0KR	1000	±20%	9.0	5.0	7.5	14.42
WKO222MPCPF0KR	2200	±20%	12.0	5.0	7.5	16.10
WKO472MPCPF0KR	4700	±20%	14.5	5.0	12.5	28.25
WKP X1/Y1 760/500VAC SERIES						
WKP471MCPEF0KR	470	±20%	8.0	6.0	12.5	14.22
WKP102MCPEJ0KR	1000	±20%	10.0	6.0	12.5	17.76
WKP222MCPEJ0KR	2200	±20%	13.0	6.0	12.5	26.21
WKP472MCPEJ0KR	4700	±20%	18.0	6.0	12.5	46.97



BC COMPONENTS 370, 371, 372, AND 373 SERIES METALLIZED POLYESTER FILM CAPACITORS

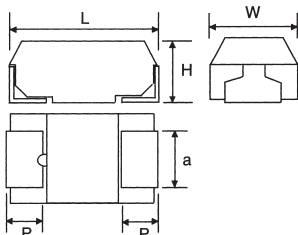
FEATURES: Low-inductive wound cell of metallized polyethyleneerephthalate (PETP) film potted in a flame-retardant case. Typical application is for blocking and decoupling, bypass, and use as energy reservoir. **SPECIFICATIONS:** Potted type radial leads. Climatic category: 55/105/56. Rated temperature: 85°C. Maximum application temperature: 105°C. Capacitance tolerance: ±10%. Encapsulation: plastic case, epoxy resin sealed, flame retardant UL-Class 94 V-0. Performance grade: grade 1 (long life).

Cat. No.	VDC	Cap (µF)	Dimensions (mm)			Net Price Per 100
			B	H	L	
2222 370 11104	63	0.1	2.5	6.5	7.2	\$15.96
2222 370 11154	63	0.15	3.5	8.0	7.2	21.44
2222 370 11224	63	0.22	3.5	8.0	7.2	26.17
2222 370 11334	63	0.33	4.5	9.0	7.2	33.25
2222 370 11474	63	0.47	5.0	10.0	7.2	42.25
2222 370 11684	63	0.68	6.0	11.0	7.2	57.12
2222 370 11105	63	1.0	6.0	11.0	7.2	66.12
2222 371 11105	63	1.0	5.0	10.5	7.62	75.90
2222 370 21153	100	0.015	2.5	6.5	7.2	15.45
2222 370 21223	100	0.022	2.5	6.5	7.2	16.04
2222 370 21333	100	0.033	2.5	7.5	7.2	16.63
2222 370 21473	100	0.047	3.5	8.0	7.2	17.21
2222 370 21683	100	0.068	3.5	8.0	7.2	22.30
2222 370 21104	100	0.1	3.5	8.0	7.2	25.27
2222 371 21104	100	0.1	3.0	8.0	7.62	27.15
2222 372 21104	100	0.1	4.0	9.0	12.5	32.98
2222 372 21224	100	0.22	4.0	9.0	12.5	37.52
2222 372 21474	100	0.47	5.0	11.0	12.5	51.25
2222 373 21105	100	1.0	6.0	12.0	17.5	74.72
2222 373 21225	100	2.2	8.5	15.0	17.5	140.45
2222 373 21335	100	3.3	8.5	18.0	26.0	203.04
2222 373 21475	100	4.7	10.0	19.5	26.0	262.11
2222 373 21685	100	6.8	11.0	21.0	31.0	369.70
2222 373 21106	100	10.0	10.0	19.5	26.0	532.05
2222 370 41472	250	0.0047	2.5	6.5	7.2	14.87
2222 370 41682	250	0.0068	2.5	6.5	7.2	14.87
2222 370 41103	250	0.01	2.5	6.5	7.2	15.18
2222 370 41104	250	0.01	6.0	11.0	7.2	33.53
2222 370 41223	250	0.022	3.5	8.0	7.2	17.84
2222 372 41473	250	0.047	4.0	9.0	12.5	31.53
2222 372 41104	250	0.1	4.0	10.0	12.5	32.98
2222 373 43225	250	2.2	10.0	19.5	26.0	161.57
2222 370 51102	400	0.001	2.5	6.5	7.2	14.87
2222 370 51222	400	0.0022	2.5	6.5	7.2	14.87
2222 370 51103	400	0.01	3.5	8.0	7.2	16.63
2222 372 51103	400	0.01	4.0	9.0	12.5	31.26
2222 372 51223	400	0.022	4.0	9.0	12.5	31.26
2222 372 51333	400	0.033	4.0	10.0	12.5	31.26
2222 372 51473	400	0.047	5.0	11.0	12.5	31.53
2222 373 53473	400	0.047	5.0	11.0	17.5	34.82
2222 373 53104	400	0.1	5.0	11.0	17.5	41.47
2222 373 53224	400	0.22	6.0	12.0	17.5	59.82
2222 373 53105	400	1.0	10.0	19.5	26.0	142.01



Part's indicated with a leaf are considered RoHS July 2006 compliant based on the manufacturer's confirmation at the time of publishing. For additional information please contact Electro Sonic.

Cat. No.	Cap (µF)	D×L×F mm	Max. Ripple	Max ESR Ohms	Net Price
25 VDC					
NRSA220M25V5X11F	22	5x11x2.0	70	10.6	.04
NRSA330M25V5X11F	33	5x11x2.0	85	7.04	.04
NRSA470M25V5X11F	47	5x11x2.0	100	4.94	.04
NRSA101M25V6.3X11F	100	6.3x11x2.5	170	2.33	.06
NRSA221M25V8X11.5F	220	8x11.5x3.5	270	1.06	.11
NRSA331M25V10X12.5F	330	10x12.5x5.0	400	0.704	.14
NRSA471M25V10X16F	470	10x16x5.0	510	0.494	.19
NRSA102M25V12.5X20F	1000	12.5x20x5.0	900	0.233	.41
NRSA222M25V16X25F	2200	16x25x7.5	1300	0.121	.78
35 VDC					
NRSA100M35V5X11F	10	5x11x2.0	50	19.9	.04
NRSA220M35V5X11F	22	5x11x2.0	75	9.05	.04
NRSA330M35V5X11F	33	5x11x2.0	95	6.04	.04
NRSA470M35V6.3X11F	47	6.3x11x2.5	120	4.24	.06
NRSA101M35V8X11.5F	100	8x11.5x3.5	210	1.99	.11
NRSA221M35V10X12.5F	220	10x12.5x5.0	370	0.905	.14
NRSA331M35V10X16F	330	10x16x5.0	470	0.604	.19
NRSA471M35V10X20F	470	10x20x5.0	600	0.424	.24
NRSA102M35V12.5X25F	1000	12.5x25x5.0	960	0.199	.51
50 VDC					
NRSA100M50V5X11F	10	5x11x2.0	55	16.6	.04
NRSA220M50V5X11F	22	5x11x2.0	85	7.54	.04
NRSA330M50V6.3X11F	33	6.3x11x2.5	110	5.03	.06
NRSA470M50V6.3X11F	47	6.3x11x2.5	140	3.53	.06
NRSA101M50V8X11.5F	100	8x11.5x3.5	230	1.66	.11
NRSA221M50V10X16F	220	10x16x5.0	420	0.754	.19
NRSA331M50V10X20F	330	10x20x5.0	580	0.503	.24
NRSA471M50V12.5X20F	470	12.5x20x5.0	730	0.353	.41
NRSA102M50V16X25F	1000	16x25x7.5	1100	0.166	.78
10 VDC					
NRSZ221M10V6.3x11F	220	6.3x11x2.5	300	0.22	.15
16 VDC					
NRSZ101M16V6.3X11F	100	6.3x11x2.5	280	0.32	.15
NRSZ221M16V8X11.5F	220	8x11.5x3.5	560	0.11	.22
NRSZ471M16V8X20F	470	8x20x3.5	800	0.069	.37
NRSZ102M16V10X22F	1000	10x22x5.0	1450	0.039	.51
NRSZ222M16V12.5X25F	2200	12.5x25x5.0	1700	0.037	.90
25 VDC					
NRSZ221M25V8X15F	220	8x15x3.5	730	0.085	.33
NRSZ221M25V10X12.5F	220	10x12.5x5.0	630	0.12	.30
NRSZ331M25V8X20F	330	8x20x3.5	800	0.069	.37
NRSZ471M25V10X16F	470	10x16x5.0	1010	0.065	.41
NRSZ102M25V12.5X20F	1000	12.5x20x5.0	1600	0.038	.70
35 VDC					
NRSZ470M35V6.3X11F	47	6.3x11x2.5	280	0.322	.20
NRSZ101M35V8X11.5F	100	8x11.5x3.5	560	0.11	.21
NRSZ221M35V8X20F	220	8x20x3.5	800	0.069	.48
NRSZ221M35V10X16F	220	10x16x5.0	950	0.085	.41
NRSZ331M35V10X20F	330	10x20x5.0	1250	0.044	.49
NRSZ471M35V10X20F	470	10x20x5.0	1250	0.054	.47
NRSZ102M35V12.5X25F	1000	12.5x25x5.0	1800	0.029	.94
NRSZ332M35V18X35.5F	3300	18x35.5x7.5	2700	0.022	2.06
50 VDC					
NRSZ100M50V5X11F	10	5x11x2.0	110	1.7	.11
NRSZ470M50V6.3X11F	47	6.3x11x2.5	220	0.43	.16
NRSZ101M50V8X15F	100	8x15x3.5	500	0.18	.40
NRSZ221M50V10X20F	220	10x20x5.0	850	0.1	.45
NRSZ331M50V10X22F	330	10x22x5.0	1000	0.072	.52
NRSZ471M50V12.5X20F	470	12.5x20x5.0	1200	0.059	.82
NRSZ102M50V16X25F	1000	16x25x7.5	1750	0.039	1.42



NIC COMPONENTS MOLDED TANTALUM CHIP CAPACITORS

FEATURES: Molded construction for high soldering heat resistance. Both flow and reflow soldering applications. **SPECIFICATIONS:** Operating temperature range: -55°C to +125°C. Leakage current @ 25°C after 5 minutes at rated voltage: Not more than 0.01CV or 0.5µA, whichever is greater. Load life: 2000 hours @ +85°C.

DIMENSIONS-MILLIMETERS

Case Code	Metric Code	L	W	H	P	A
A	3216	3.2±0.2	1.6±0.2	1.6±0.2	0.8±0.3	1.2±0.1
B	3528	3.5±0.5	2.8±0.2	1.9±0.2	0.8±0.3	2.2±0.1
C	6032	6.0±0.3	3.2±0.3	2.6±0.3	1.3±0.3	2.2±0.1
D	7343	7.3±0.2	4.3±0.2	2.9±0.3	1.3±0.3	2.4±0.1

Cat. No.	EIA Case Size	Cap (µF)	Tol	ESR (Ω) @ 25°C 100kHz Max.	Net Price
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6.3 VDC					
NTC-T106K6.3TRAF	A	10µF	±10%	4.0	\$1.18

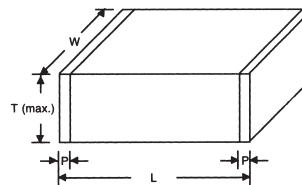
10 VDC					
NTC-T475K10TRAF	A	4.7µF	±10%	5.0	.18
NTC-T106K10TRAF	A	10µF	±10%	3.2	.18
NTC-T106K10TRBF	B	10µF	±10%	2.5	.26
NTC-T226K10TRBF	B	22µF	±10%	2.4	.33
NTC-T107K10TRDF	D	100µF	±10%	0.7	.80

16 VDC					
NTC-T105K16TRAF	A	1µF	±10%	10.0	.18
NTC-T335K16TRAF	A	3.3µF	±10%	5.0	.15
NTC-T475K16TRAF	A	4.7µF	±10%	5.0	.18
NTC-T475K16TRBF	B	4.7µF	±10%	3.0	.26
NTC-T106K16TRBF	B	10µF	±10%	2.4	.26
NTC-T106K16TRCF	C	10µF	±10%	1.8	.52
NTC-T226K16TRBF	B	22µF	±10%	2.5	.28
NTC-T226K16TRCF	C	22µF	±10%	1.6	.52
NTC-T476K16TRDF	D	47µF	±10%	0.8	.82

20 VDC					
NTC-T225K20TRAF	A	2.2µF	±10%	6.0	.18
NTC-T475K20TRBF	B	4.7µF	±10%	3.0	.26
NTC-T226K20TRDF	D	22µF	±10%	0.8	.80

25 VDC					
NTC-T105K25TRAF	A	1µF	±10%	8.0	.18
NTC-T335K25TRBF	B	3.3µF	±10%	3.5	.30
NTC-T106K25TRCF	C	10µF	±10%	1.8	.52
NTC-T226K25TRDF	D	22µF	±10%	0.8	.87

35 VDC					
NTC-T104K35TRAF	A	0.1µF	±10%	18.0	.18
NTC-T224K35TRAF	A	0.22µF	±10%	18.0	.18
NTC-T474K35TRAF	A	0.47µF	±10%	12.0	.18
NTC-T474K35TRBF	B	0.47µF	±10%	8.0	.22
NTC-T105K35TRBF	B	1µF	±10%	4.8	.26
NTC-T106K35TRDF	D	10µF	±10%	1.0	.80



NIC COMPONENTS CERAMIC CHIP CAPACITORS

FEATURES: Nickel barrier terminations and excellent strength; unmarked.

EIA Code	Metric Code	L	W	T	P
0402	1005	1.0±0.05	0.5±0.05	0.6	.20±0.1
0603	1608	1.6±0.15	0.8±0.15	1.0	.12-.51
0805	2012	2.0±0.2	1.25±0.2	1.3	.25-.71
1206	3216	3.2±0.2	1.6±0.2	1.8	.25-.71

Cat. No.	Case Size	Type	(µF)	Tol	Net Price*
16 VDC					
NMC0402X7R103K16TRPF	0402	X7R	.01µF	±10%	\$24.94
NMC0402Y5V104Z16TRPF	0402	Y5V	.1µF	+80-20%	24.94
50 VDC					
NMC0402NPO101J50TRPF	0402	NPO	100pF	±5%	29.93
NMC0402X7R102K50TRPF	0402	X7R	1000pF	±10%	19.95
16 VDC					
NMC0603X7R473K16TRPF	0603	X7R	.047µF	±10%	17.46
NMC0603X7R104K16TRPF	0603	X7R	.1µF	±10%	13.97
NMC0603Y5V334Z16TRPF	0603	Y5V	.33µF	+80-20%	21.82
25 VDC					
NMC0603Y5V104Z25TRPF	0603	Y5V	.1µF	+80-20%	8.73

*Net Price per 1000.

Continued on next page....

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

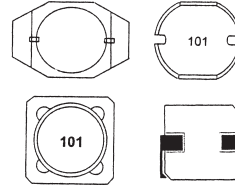
NOTE: RoHS Compliant. For current ratings please refer to the Electro Sonic Web-site www.e-sonic.com or contact your sales representative. High current NCB-H series also available.

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.

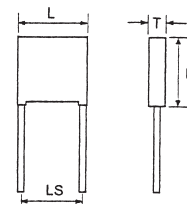


NIC SMT POWER INDUCTORS

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