Lower Voltage Disc Capacitors

12V TO 1KV

Lower Voltage Capacitors are stocked in distribution. See “Packaging Options” section for other electrical and mechanical options, including Tape & Reel.

Fig 1

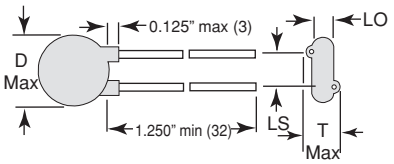


Fig 2

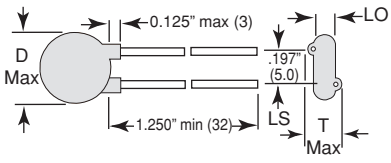
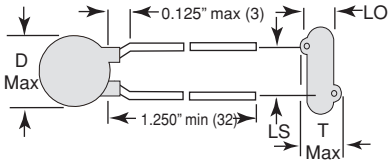


Fig 3



STANDARD WIRE SIZE:

- C and E Sizes - 24 gauge (.020") Tinned Copper Clad Steel Wire.
- F through Q Sizes - 22 gauge (.025") Tinned Copper Wire.

TAPE & REEL OPTIONS:

- Tape & Reel available on diameter sizes .250" to .680".
- To specify T & R, add two letter suffix to catalog number for example: TGS10 QA-suffix describes alternate wire lead forms & lead spacing options - see complete description in “Packaging Options” section.
- 10,000 piece minimum shipment for T & R.

SIZE CODE	DIAMETER “D” MAX		THICKNESS “T” MAX		LEAD SPACING “LS” FIG 1 & 3	
	in	mm	in	mm	in	mm
C	.250	6.4	.156	4.0	.250	6.4
E	.290	7.4	.156	4.0	.250	6.4
E_7	.330	8.4	.156	4.0	.250	6.4
F	.370	9.4	.156	4.0	.250	6.4
F_7	.400	10.2	.156	4.0	.250	6.4
G	.440	11.2	.156	4.0	.250	6.4
G_7	.460	11.7	.156	4.0	.250	6.4
H	.490	12.4	.156	4.0	.250	6.4
H_3	.490	12.4	.156	4.0	.375	9.5
H_7	.530	13.5	.156	4.0	.375	9.5
J	.560	14.2	.156	4.0	.375	9.5

SIZE CODE	DIAMETER “D” MAX		THICKNESS “T” MAX		LEAD SPACING “LS” FIG 1 & 3	
	in	mm	in	mm	in	mm
K	.630	16.0	.156	4.0	.375	9.5
L	.680	17.3	.156	4.0	.375	9.5
M	.760	19.3	.156	4.0	.375	9.5
P	.890	22.6	.156	4.0	.375	9.5
R	.510	13.0	.200	5.1	.375	9.5
T	.580	14.7	.200	5.1	.375	9.5
U	.640	16.3	.200	5.1	.375	9.5
W	.700	17.8	.200	5.1	.375	9.5
X	.770	19.6	.200	5.1	.375	9.5
Y	.900	22.9	.200	5.1	.375	9.5
Q	.950	24.1	.200	5.1	.375	9.5

VOLTAGE CLASS	LEAD OFFSET “LO” (nom)	
	in	mm
100	.040	1.0
500	.040	1.0
1000	.050	1.3

12/25/50/100V HYPERCON CONSTRUCTION HIGH-CAPACITANCE DISCS

- Application: Low Voltage Bulk Filter

563C Series
Class IV Dielectirc

12 VDC, Y5R, 2.5ΩF, 5% DF				
VALUE		CATALOG NUMBER	SIZE	
µF	TOL.		FIGURE	CODE
.05	Y	HY105	3	E
.10	M	HY110	1	G
.22	M	HY122	1	J
.47	M	HY147	1	P

25 VDC, Y5R, 5ΩF, 5% DF				
VALUE		CATALOG NUMBER	SIZE	
µF	TOL.		FIGURE	CODE
.01	M	HY820	3	C
.022	M	HY825	3	E
.033	M	HY530	3	E
.047	M	HY835	3	F
.10	M	HY850	1	G

50 VDC, Y5R, 25ΩF, 4% DF				
VALUE		CATALOG NUMBER	SIZE	
µF	TOL.		FIGURE	CODE
.01	M	HY920	3	C
.022	M	HY925	3	E
.047	M	HY935	1	G
.10	M	HY950	1	H

100 VDC, Y5S, 100ΩF, 3% DF				
VALUE		CATALOG NUMBER	SIZE	
µF	TOL.		FIGURE	CODE
.0022	M	HMMD22	2	C
.0047	M	HMMD47	2	C
.01	M	HMMS10	3	E
.10	M	HMMP10	1	L

100 VOLT GENERAL PURPOSE

- Application Range: Up to 250 VDC, 75 VAC RMS**
- Insulation Resistance: 10,000 MΩ minimum, 500ΩF
- Dissipation Factor: 3.0% maximum

562C Series
- Dielectric Strength: 750 VDC, 250 VAC RMS

VALUE		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIGURE	CODE	
10	D	TSQ10	2	C	NP0
22	J	TSQ22	2	C	NP0
33	K	TSQ33	2	C	U2J
47	K	TSQ47	2	C	U2J
100	K	TST10	2	C	X7R
220	K	TST22	2	C	X7R
330	K	TST33	2	C	X7R

VALUE		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIGURE	CODE	
470	K	TST47	2	C	X7R
1000	K	TSD10	2	C	X7R
2200	K	TSD22	2	F	X7R
3300	K	TSD33	2	F	X7R
4700	K	TSD47	2	G	X7S
6800	K	TSD68	2	H	X7S
0.01µF	K	TSS10	2	J	X7S

VALUE		CATALOG NUMBER	SIZE		TEMP. COEF.
µF	TOL.		FIGURE	CODE	
.005	M	TGD50	1	E	Z5U
.01	M	TGS10	1	F	Z5U
.02	M	TGS20	1	G	Z5U
.022	M	TSS22	1	T	X7S
.047	M	TGS47	1	R	Z5U
.050	M	TGS50	1	R	Z5U
.10	M	TGP10	1	W	Z5U

** See “Application Data” section for limits on AC voltage.

500 VOLT GENERAL PURPOSE

• Application Range:
Up to 600 VDC, 100 VAC RMS**

• Insulation Resistance: 15,000 MΩ minimum, 750ΩF
• Dissipation Factor: 3.0% maximum

562C Series
• Dielectric Strength:
1500 VDC, 300 VAC RMS

VALUE pF	TOL.	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
1000	K	5TSD10	3	E	X7R
1000	M	5TSSD10	3	C	Y5U
1500	K	5TSD15	3	F	X7R
2200	K	5TSD22	3	F	X7R
3300	K	5TSD33	1	G	X7R
4700	K	5TSD47	1	H	X7R
5000	Z	5TSD50	1	F	Z5U

VALUE µF	TOL.	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
.0068	K	5TSD68	1	H	X7S
.01	K	5TSS10	1	J	X7S
.01	M	5GASS10	1	G	Z5U
.01	Z	5HKSS10	1	G	Z5U
.02	M	5GASS20	1	J	Z5U
.022	M	5TSS22	1	L	X7S
.033	M	5TSS33	1	X	X7S

VALUE µF	TOL.	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
.05	M	5GAS50	1	P	Z5U
.05	Z	5HKS50	1	T	Z5U
.10	M	5GAP10	1	X	Z5U
.10	Y	5HKSP10	1	Q	Y5V
.10	Z	5HKP10	1	X	Z5U
.15	Y	5GAP15	1	Y	Z5U
.20	M	5GAP20	1	Q	Z5U

1000 VOLT GENERAL PURPOSE

• Application Range:
Up to 1000 VDC, 150 VAC RMS**

• Insulation Resistance: 20,000 MΩ minimum, 1000ΩF
• Dissipation Factor: 2.5% maximum

562C Series
• Dielectric Strength:
2500 VDC, 500 VAC RMS

VALUE pF	TOL.	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
10	M	5GAQ10	3	C	NP0
20	M	5GAQ20	3	C	NP0
33	M	5GAQ33	3	E	U2J
47	M	5GAQ47	3	E	U2J
100	M	5GAT10	3	C	X5F
150	M	5GAT15	3	C	X5F
200	M	5GAT20	3	C	X5F
220	M	5GAT22	3	C	X5F
330	M	5GAT33	3	C	X5F
470	M	5GAT47	3	C	X5F
500	M	5GAT50	3	C	X5F

VALUE pF	TOL.	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
1000	M	5GAD10	3	E	X7R
1000	P	5HKD10	3	E	Y5U
1200	M	5GAD12	3	E	Z5U
1500	M	5GAD15	3	E	Z5U
2000	M	5GAD20	3	E	Z5U
2200	M	5GAD22	3	E	Z5U
2500	M	5GAD25	3	E	Z5U
2700	M	5GAD27	3	E	Z5U
3000	M	5GAD30	3	E	Z5U
3300	M	5GAD33	3	E	Z5U
4700	M	5GAD47	1	F	Z5U

VALUE pF	TOL.	CATALOG NUMBER	SIZE FIGURE	SIZE CODE	TEMP. COEF.
5000	M	5GAD50	1	F	Z5U
6800	M	5GAD68	1	G	Z5U
8200	M	5GAD82	1	G	Z5U
0.01µF	M	5GAS10	1	H_3	Z5U
.01	M	5HKMS10	1	H	Z5U
.01	P	5HKS10	1	H_3	Z5U
.015	M	5GAS15	1	J	Z5U
.020	M	5GAS20	1	L	Z5U
.050	M	10HKS50	1	X	Z5U
.10	M	10GAP10	1	Q	Z5U
.15	M	10GAP15	1	Q	Y5V

1KV TEMP. & VOLTAGE STABILIZED, 10% TOL.

• Application Range:
Up to 1250 VDC, 200 VAC RMS**

• Insulation Resistance: 50,000 MΩ minimum, 1000ΩF
• Dissipation Factor: 2.0% maximum

562C Series
• Dielectric Strength:
2500 VDC, 750 VAC RMS

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
10	10TSQ10	3	C	NP0
25	10TSQ25	3	E	NP0
27	10TSQ27	3	C	U2J
30	10TSQ30	3	C	U2J
33	10TSQ33	3	E	U2J
39	10TSQ39	3	E	U2J
47	10TSQ47	3	E	U2J
50	10TSQ50	3	E	U2J
56	10TSQ56	3	C	X5F
68	10TSQ68	3	C	X5F

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
75	10TSQ75	3	C	X5F
82	10TSQ82	3	C	X5F
100	10TST10	3	C	X5F
120	10TST12	3	C	X5F
150	10TST15	3	C	X5F
180	10TST18	3	C	X5F
200	10TST20	3	C	X5F
220	10TST22	3	C	X5F
250	10TST25	3	C	X5F

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
270	10TST27	3	C	X5F
300	10TST30	3	C	X5F
330	10TST33	3	C	X5F
390	10TST39	3	C	X5F
470	10TST47	3	C	X5F
500	10TST50	3	C	X5F
560	10TST56	3	E	X5F
680	10TST68	3	E	X5F
750	10TST75	3	E	X5F

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
820	10TST82	3	E	X5F
1000	10TSD10	3	E	X5F
1500	10TSD15	1	G	X5F
2000	10TSD20	1	H_3	X5F
2200	10TSD22	1	H_3	X5F
2700	10TSD27	1	J	X5F
3300	10TSD33	1	J	X5F
4700	10TSD47	1	L	X5F
.01µF	10TSS10	1	L	X5S

1KV NPO/N750 PRECISION DISC CAPACITORS, 5% TOL

• Application Range:
Up to 1500 VDC, 300 VAC RMS**
• dv/dt up to 10,000 V/usec

• Insulation Resistance: 100,000 MΩ minimum, 1000ΩF
• Dielectric Strength: 2500 VDC, 750 VAC RMS
• High Q: 1000, Dissipation Factor: 0.1% max

561C Series
Temperature/Frequency/Voltage Stable
• Application: NP0 capacitors are used when the ultimate in stability is required
• N750/S3L are smaller & ideal for "lossless snubbers".

VALUE pF*	CATALOG NUMBER	SIZE FIG.	SIZE CODE
1.0	10TCCV10	3	C
2.2	10TCCV22	3	C
2.7	10TCCV27	3	C
3.0	10TCCV30	3	C
3.3	10TCCV33	3	C
3.9	10TCCV39	3	C
4.7	10TCCV47	3	C
5.0	10TCCV50	3	C
5.6	10TCCV56	3	C
6.8	10TCCV68	3	C
8.2	10TCCV82	3	C

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE
10	10TCCQ10	3	C
12	10TCCQ12	3	C
15	10TCCQ15	3	C
18	10TCCQ18	3	E
20	10TCCQ20	3	E
22	10TCCQ22	3	E
25	10TCCQ25	3	E
27	10TCCQ27	3	F
30	10TCCQ30	3	F
33	10TCCQ33	3	F
39	10TCCQ39	3	F

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE
47	10TCCQ47	1	G
50	10TCCQ50	1	G
56	10TCCQ56	1	G
68	10TCCQ68	1	H
82	10TCCQ82	1	H_3
100	10TCCT10	1	J
120	10TCCT12	1	J
150	10TCCT15	1	K
180	10TCCT18	1	L
220	10TCCT22	1	M
270	10TCCT27	1	P

VALUE pF	CATALOG NUMBER	SIZE FIG.	SIZE CODE	TEMP. COEF.
N750/S3L Disc Capacitors				
33	10TCUQ33	3	E	U
47	10TCUQ47	3	E	U
68	10TCUQ68	3	F	U
100	10TCUT10	3	F	U
220	10TCUT22	1	G	V
330	10TCUT33	1	H	V
470	10TCUT47	1	J	V
560	10TCUT56	1	J	V
680	10TCUT68	1	K	Y
1000	10TCUD10	1	L	Y

*1.0 to 10pF are D tolerance

**See "Application Data" section for limits on AC voltage.

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