

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

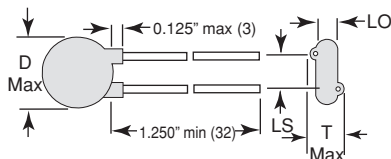


Fig 2

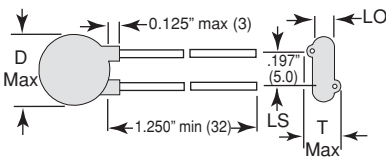
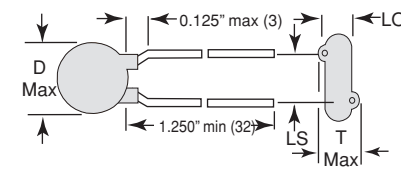


Fig 3



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

12 VDC, Y5R, 2.5ΩF, 5% DF				
VALUE	CATALOG	SIZE		
μF	TOL.	NUMBER	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	SIZE		
μF	TOL.	NUMBER	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	SIZE		
μF	TOL.	NUMBER	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	SIZE		
μF	TOL.	NUMBER	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**

VALUE	CATALOG	SIZE			TEMP. COEF.
μF	TOL.	NUMBER	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

- Insulation Resistance: 10,000 MΩ minimum, 500ΩF
- Dissipation Factor: 3.0% maximum

VALUE	CATALOG	SIZE			TEMP. COEF.
μF	TOL.	NUMBER	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	SIZE			TEMP. COEF.
μF	TOL.	NUMBER	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.



GA, HK, HM, HY, TC, TG, TS Series

Lower Voltage Disc Capacitors

Vishay Cera-Mite

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

VALUE		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIG.	CODE	
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		CATALOG NUMBER	SIZE		TEMP. COEF.
μF	TOL.		FIG.	CODE	
.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		CATALOG NUMBER	SIZE		TEMP. COEF.
μF	TOL.		FIG.	CODE	
.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

562C Series

- Dielectric Strength:
1500 VDC, 300 VAC RMS

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

VALUE		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIG.	CODE	
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		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIG.	CODE	
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		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIGURE	CODE	
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

562C Series

- Dielectric Strength:
2500 VDC, 500 VAC RMS

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

VALUE pF	CATALOG NUMBER	SIZE		TEMP. COEF.
		FIG.	CODE	
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		TEMP. COEF.
		FIG.	CODE	
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		TEMP. COEF.
		FIG.	CODE	
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		TEMP. COEF.
		FIG.	CODE	
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

562C Series

- Dielectric Strength:
2500 VDC, 750 VAC RMS

1KV NP0/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		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIG.	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		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIG.	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		CATALOG NUMBER	SIZE		TEMP. COEF.
pF	TOL.		FIG.	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		TEMP. COEF.
		FIG.	CODE	
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.



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.