陶　瓷　電　容　器
Ceramic Disc Capacitor

Reference Specification

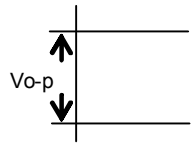
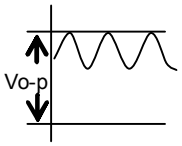
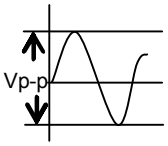
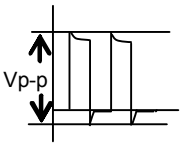
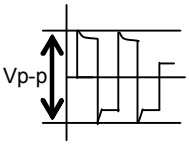
High Voltage Ceramic Capacitor
HVC-10KV-DL15-F12.5-681K
Issued Date: Dec 16,2023

Engineering Department
HVC Capacitor Manufacturing Co.,Ltd.

⚠ CAUTION

1.**OPERATING VOLTAGE**

When DC- rated capacitors are to be used in AC or ripple current circuits, be sure to maintain the Vp-p value of the applied voltage or the Vo-p which contains DC bias within the rated voltage range. When the voltage is started to apply to the circuit or it is stopped applying, the irregular voltage may be generated for a transit period because of resonance or switching. Be sure to use a capacitor within rated voltage containing these irregular voltage.

Voltage	DC Voltage	DC+AC Voltage	AC Voltage	Pulse Voltage(1)	Pulse Voltage(2)
Positional Measurement					

2. **OPERATING TEMPERATURE AND SELF-GENERATED HEAT**

Keep the surface temperature of a capacitor below the upper limit of its rated operating temperature range. Be sure to take into account the heat generated by the capacitor itself. When the capacitor is used in a high-frequency current, pulse current or the like, it may have the self-generated heat due to dielectric-loss. Applied voltage should be the load such as self-generated heat is within 5 °C on the condition of atmosphere temperature 25 °C. When measuring, use a thermocouple of small thermal capacity-K of ϕ0.1mm and be in the condition where capacitor is not affected by radiant heat of other components and wind of surroundings.

Excessive heat may lead to deterioration of the capacitor's characteristics and reliability.(Never attempt to perform measurement with the cooling fan running. Otherwise, accurate measurement cannot be ensured.)

3. OPERATING AND STORAGE ENVIRONMENT

The insulating coating of capacitors does not form a perfect seal; therefore, do not use or store capacitors in a corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. And avoid exposure to moisture. The capacitor is designed to be used in the insulating media, such as epoxy resin, silicone oil, etc.. There must be 3mm or more insulating media for each direction of the capacitor. In case of cleaning, bonding, or molding this product, verify that these processes do not affect product quality by testing the performance of a cleaned, bonded or molded product in the intended equipment. Store the capacitors where the temperature and relative humidity do not exceed -10 to 40 °C and 15 to 85 %. Use capacitors within 6 months after delivered.

4. VIBRATION AND IMPACT

Do not expose a capacitor or its leads to excessive shock or vibration during use.

5. SOLDERING

When soldering this product to a PCB/PWB, do not exceed the solder heat resistance specification of the capacitor. Subjecting this product to excessive heating could melt the internal junction solder and may result in thermal shocks that can crack the ceramic element.

When soldering capacitor with a soldering iron, it should be performed in following conditions.

Temperature of iron-tip : 400 °C max.
Soldering iron wattage : 50W max.
Soldering time : 3.5s max.

Failure to follow the above cautions may result, worst case, in a short circuit and cause fuming or partial dispersion when the product is used.

6. Limitation of Applications

Please contact us before using our products for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property.

①Aircraft equipment ②Aerospace equipment ③Undersea equipment
④Power plant control equipment ⑤Medical equipment
⑥Transportation equipment(vehicles, trains, ships, etc.) ⑦Traffic signal equipment
⑧Disaster prevention / crime prevention equipment ⑨Data-processing equipment
⑩Application of similar complexity and/or reliability requirements to the applications listed in the above.

NOTICE

Cleaning

To perform ultrasonic cleaning, observe the following conditions.
Rinse bath capacity : Output of 20 watts per liter or less.
Rinsing time : 5min maximum.
Do not vibrate the PCB/PWB directly.
Excessive ultrasonic cleaning may lead to fatigue destruction of the lead wires.

Capacitance change of capacitor

- Class 1 capacitors
  Capacitance might change a little depending on a surrounding temperature or an applied voltage. Please contact us if you use for the strict time constant circuit.
- Class 2 and 3 capacitors
  Class 2 and 3 capacitors like temperature characteristic B, E and F have an aging characteristic, whereby the capacitor continually decreases its capacitance slightly if the capacitor leaves for a long time.. Moreover, capacitance might change greatly depending on a surrounding temperature or an applied voltage. So, it is not likely to be able to use for the time constant circuit. Please contact us if you need a detail information.

⚠ NOTE

1. Please make sure that your product has been evaluated in view of your specifications with our product being mounted to your product.
2. You are requested not to use our product deviating from the agreed specifications.

1. Application

This specification is applied to high voltage ceramic capacitor used for in high voltage electric equipment.

2. Rating

2.1 Operating temperature

-35°C to +85°C

2.2 Part unmber

HVC	10KV	DL	15	F	12.5	681	K
Brand	Rated Voltage	N4700	Diameter(mm)	Pitch	Lead spacing	Cap.	Tol.

• Temperature characteristic

	Temperature characteristic
	N4700

• Rated voltage

	Rated voltage
	DC10kV

• Capacitance

The first two digits denote significant figures ; the last digit denotes the multiplier of 10 in pF.

ex.) In case of 680.

$$68 \times 10^{1} = 680 \text{ pF}$$

• Capacitance tolerance

Please refer to [4. Part number list].

• Lead style

	Lead style
	Straight long

Please refer to [4. Part number list].

Solder coated copper wire is applied for termination.

• Packing type

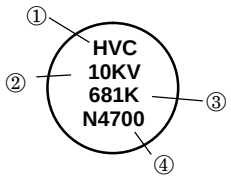
	Packing type
	Bulk

• Individual specification

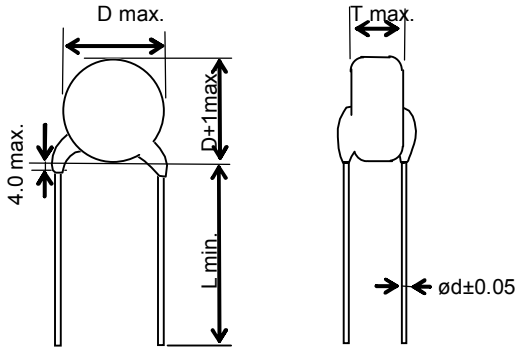
In case part number cannot be identified without ‘individual specification‘, it is added at the end of part number.

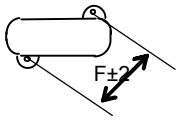
3.2 Marking

① Brand
② Rated Voltage
③ Capacitance and Tolerance
④ Temperature Characteristic



4.Part number List





Unit:mm

Temp. Char.	Cap. (pF)	Cap. tol. (%)	Customer part number	HVC Part number	DC Rated. volt. (kV)	Dimensions (mm)						Pack qty.
						D	T	F	L	d		
N4700	680	±10		HVC-10KV-DL15-F12.5-681K	10	15	7	12.5	20	0.8		500

5.TEST

5-1VISUAL EXAMINATION CHECK OF DIMENSIONS

No.	ITEM	SPECIFICATION	TESTING METHOD
1	Appearance dimensions	See 3,4.	Shall be visually examined or Venire Calipers.
2	Marking	To be easily legible.	Shall be visually examined.

5-2ELECTRICAL PERFORMANCE TESTS

<table>
<tr><td rowspan="2">1</td><td rowspan="2">Dielectric Strength</td><td>Between Lead wires</td><td rowspan="2">No failure</td><td>The capacitors shall not be damage when DC voltage of 150% of the rated voltage are applied between the lead wires for 60 s in insulate liquid or gas.
(Charge/discharge current: 50mA max.)</td></tr>
<tr><td>Body insulation</td><td>The capacitors is placed in the container with metal balls of diameter 1mm so that each lead wires, Short-circuited, is kept approximately 2mm off the balls as shown in the figure, and DC voltage of 15kV is applied for 10 s between capacitor lead wires and small metals.
(Charge/discharge current: 50mA max.)</td></tr>
<tr><td>2</td><td>Insulation Resistance (I.R.)</td><td>Between Lead wires</td><td>200,000 MΩ min.</td><td>The insulation resistance shall be measured with DC 1kV within 60±5 s of charging.</td></tr>
<tr><td>3</td><td colspan="2">Capacitance</td><td>Within the specified tolerance.</td><td>The capacitance shall be measured at 20°C with 1±0.2kHz and AC5V(r.m.s.) max..</td></tr>
<tr><td>4</td><td colspan="2">Dissipation Factor (D.F.)</td><td>0.2% max.</td><td>Same condition as capacitance.</td></tr>
<tr><td>5</td><td colspan="2">Temperature Characteristic</td><td>-4700ppm/ °C</td><td>The capacitance measurement shall be made at each step specified in table.
Capacitance change from the value of step 3 shall not exceed the limit specified.
<table>
<tr><td>Step / Temp.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
<tr><td>N4700</td><td>-</td><td>-</td><td>20±2℃</td><td>85±2℃</td><td>20±2℃</td></tr>
</table></td></tr>
</table>

5-3 MECHANICAL PERFORMANCE TESTS

No.	ITEM		SPECIFICATION	TESTING METHOD
1	Strength of Lead	Pull	Lead wire shall not cut off. Capacitor shall not be broken.	Fix the body of capacitor, apply a tensile weight gradually to each lead wire in the radial direction of capacitor up to 10N, and keep it for 10±1 s.
		Bending		Each lead wire shall be subjected to 5N weight and then a 90° to bend, at the point of egress, in one direction, return to original position, and then a 90° bend in the opposite direction at the rate of one bend in 2 to 3 s.
2	Solderability of Leads		Lead wire shall be soldered with uniformly coated on the axial direction over 3/4 of the circumferential direction.	The lead wire shall be dipped into a 25% methanol solution of rosin and then into molten solder of 235±5°C for 2±0.5 s. In both cases the depth of dipping is up to about 1.5 to 2.0mm from the root of lead wires.
3	Soldering Effect	Appearance	No marked defect.	The lead wires shall be immersed into the melted solder of 350±10°C up to about 1.5 to 2.0mm from the main body for 3.5±0.5 s. Post-treatment: Capacitor shall be stored for 24±2 h at room condition.
		Capacitance Change	Within±10%	
		Dielectric Strength (Between lead wires)	No failure	

HVC CAPACITOR MANUFACTURING CO., LTD
赫威斯电容器制作有限公司

公 司 简 介

赫威斯电容器（HVC Capacitor）制作有限公司为港资企业，成立于 2012 年 1 月，为拥有 20 多年生产高压陶瓷产品台系厂商成立的出口运营品牌，生产基地位于东莞虎门，产品 95%出口。

赫威斯电容器专业生产高压陶瓷电容，蓝色陶瓷片型和螺栓型陶瓷电容，其中陶瓷片电容电压做到 2KV 到 50KV，拥有 独特专利的 N4700 军工级别陶瓷介电材质（N4700 材质 6KV 到 40KV），主要应用在高端医疗电子设备，如 CT，医疗 X 光机，C 型臂，DR 机，牙医 X 光机，机场安检，无损检测，静电除尘设备等等。螺栓型陶瓷片电容主打 N4700 材质，电压范围 10KV 到 150KV, 外形为黑色环氧树脂包封。主要客户为通用电气，柯尼卡美能达，日立 ABB, 尼康，西门子，美国强生，美国贝克休斯等知名 500 强企业和众多纳斯达克上市医疗设备公司。

用中国产军工级别材质生产达到外国高端工业水准的电子零件，是赫威斯公司的经营方针和一贯追求。2017 年起至今，美日欧品牌如日本**村田**，美国 **AVX**，美国**威世**纷纷由于商业考量和疫情原因退出市场造成供需缺口，赫威斯电容很好地承接了国际高压设备客户的需求。 2018 年起赫威斯公司采用收购和合作方式，建立高压电容相搭配的高压二极管和高压厚膜电阻产品线，也逐渐获得高压设备客户的认可。

赫威斯公司现有国外代理商伙伴分布在德国、法国、英国、美国、日本、韩国、印度、俄罗斯。为应对中国市场外资工厂的需求，也设立了中国代理商，国内外代理商主要由赫威斯公司指派跟进当地重点客户。 我司的目标是成为高压电子零件行业知名的新兴品牌。

HVC Capacitor is HongKong owned manufacturing company, with over 20 years production experience in high voltage ceramic capacitors field. Our plant located in Dongguan City, Southern China. Currently, 95% of HVC product are exported, HVC capacitor also has significant present in domestic market.

HVC Capacitor specializes in producing both lead type ceramic disc capacitors (blue color) and screw terminal type ceramic capacitors(black resin). For ceramic disc type available voltage from 2KV to 50KV (patent N4700 material) Typical applications including Medical X-ray machines, C-arm, DR(digital radiography), Dental X-ray, Security scanner, NDT(Industrial Non-destructive testing), electrostatic precipitator, and negative Ion machines etc.For screw terminal caps, HVC Capacitor also using N4700 ceramic dielectric, available voltage ranging from 10KV to 150KV. Key customers include GE Healthcare (General Electric) , Konica Minolta, Hitachi ABB, Nikon, Siemens, Johnson & Johnson, Baker Hughes, and other Fortune 500 companies. HVC Capacitor's screw terminal products has approved by numbers of NASDAQ-listed medial machine companies.

HVC using Chinese military-grade ceramic dielectric to build capacitor, to meet foreign high end industrial quality demands. Since 2017, HVC Capacitor has successfully replaced Japanese **Murata** and American **Vishay** and **AVX**, who facing obsoleted and supplement and costing problem. HVC Capacitor also builds own brand high voltage diodes(HVD series) and high voltage thick film resistors(HVR series) to meet customer complementary requirements. HV diodes matching up with high voltage ceramic capacitor to build up voltage multiplier circuit, which is essential for high voltage power supply. HVC's HVD series diode has already been approved by important European, USA, and Japanese end user.

HVC Capacitor has established an international distribution channel in advance industrial countries, such as Germany, France, U.K., U.S.A, Japan, Korea, India, and Russia. In U.S. market, HVC cooperates with global top electronic component distributors like **AVNET, Digi-Key, Bisco Industries, IBS electronics**. HVC also signed up two Chinese domestic distributors to handle requirement from local EMS/OEM.

HVC Capacitor strive to be well-known emerging brand in high voltage component industry.

HVC CAPACITOR MANUFACTURING CO., LTD
赫威斯电容器制作有限公司

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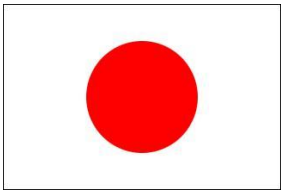

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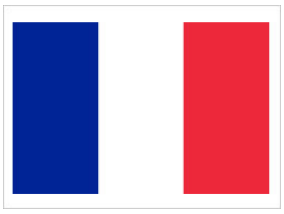

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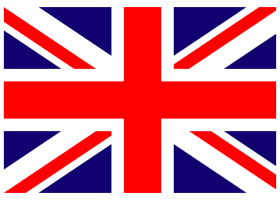

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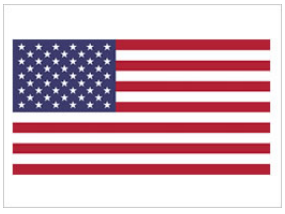

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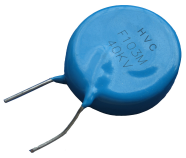
APPLICATION

Electrostatic Spraying Equipment

Welding Equipment



Negative Ion Generator

Medical Equipment(CT)

Tesla Coil

Power Electronic Equipment

HVC CAPACITOR MANUFACTURING CO., LTD
赫威斯电容器制作有限公司

KEY CLIENTS

Johnson & Johnson

BAKER HUGHES

KONICA MINOLTA

Nordson DAGE

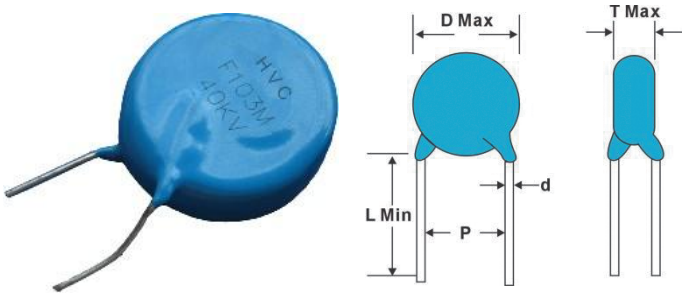
HITACHI ABB

SIEMENS Healthineers

GE Healthcare

Nikon

Ceramic Disc Capacitors Class 1 and 2, 1 kV_{DC} to 50 kV_{DC} , General Purpose



Capacitors with 7.5 mm (0.30") to 15 mm (0.40") lead spacing(P)

FEATURES

- Low losses
- High stability
- High capacitance in small size
- Kinked (preferred) or straight leads
- Compliant to RoHS directive 2002/95/EC

RoHS COMPLIANT

APPLICATIONS

- DC high voltage
- Pulse high voltage
- SMPS
- HV power supply
- HF ballast

QUICK REFERENCE DATA	
DESCRIPTION	UJ,SL,X5F,X7R,N4700,Y5T,Y5U,Y5V
Voltage (V_{DC})	1000 to 50000
Min. Capacitance (pF)	10
Max. Capacitance (pF)	33 000
Mounting	Through hole

DESIGN

The capacitors consist of a ceramic disc both sides of which are silver-plated. Connection leads are made of tinned copper.

The capacitors may be supplied with kinked or straight leads with a lead spacing of 5 mm (0.20"), 7.5 mm (0.30") or 10 mm (0.40") and a lead length from 4 mm to 30 mm. The standard tolerance on capacitance is 5 % or 10 % for class 1 capacitors and ± 10 % or ± 20 % for class 2 capacitors. Encapsulation is made of blue-colored epoxy-resin.

OPERATING TEMPERATURE RANGE

Class 1: SL, - 40 °C to + 85 °C

Class 1: N4700, - 25 °C to + 100 °C

Class 2: Y5T, Y5U, Y5V, - 25 °C to + 85 °C

Class 2: X7R, - 40 °C to + 125 °C

TEMPERATURE COEFFICIENTS

Class 1 SL, N4700

Class 2 X7R, Y5P, Y5T, Y5V, X5F,Y5U

CAPACITANCE RANGE

10 pF to 33 000 pF

RATED DC VOLTAGE

1 kV to 50 kV

DIELECTRIC STRENGTH

150 % of rated voltage (10 kV to 50 kV)

INSULATION RESISTANCE AT 500 V_{DC}

N4700:	>= 200 000 MΩ
UJ,SL,X5F,X7R,Y5T:	>= 100 000 MΩ
Y5U,Y5V:	>= 10 000 MΩ

TOLERANCE ON CAPACITANCE

± 5 %; ± 10 %; ± 20 %; + 80/- 20 %

Other tolerances available on request

DISSIPATION FACTOR

UJ,SL:	$6X10^{-4}$
X5F:	1%
X7R:	1.5%
N4700:	0.2%
Y5T:	1%
Y5U,Y5V:	2%

Ceramic Disc Capacitors Class 1 and 2, 1 kV_{DC} to 50 kV_{DC} , General Purpose

N0.	Part Number	Material	Max (mm)			
			D	T	P	d
1	HVC-2KV-N08-F7.5-10PK	NP0	8	4	7.5	0.6
2	HVC-2KV-N08-F7.5-15PK	NP0	8	4	7.5	0.6
3	HVC-2KV-SL08-F7.5-22PK	SL	8	4	7.5	0.6
4	HVC81-2KV-SL08-F7.5-27PK	SL	8	4	7.5	0.6
5	HVC-2KV-SL08-F7.5-33PK	SL	8	4	7.5	0.6
6	HVC-2KV-SL08-F7.5-47PK	SL	8	4	7.5	0.6
7	HVC-2KV-SL08-F7.5-56PK	SL	8	4	7.5	0.6
8	HVC-2KV-SL08-F5-68PK	SL	8	4	7.5	0.6
9	HVC-2KV-DP08-F5-101K	Y5P	8	4	7.5	0.6
10	HVC-2KV-DP08-F7.5-151K	Y5P	8	4	7.5	0.6
11	HVC-2KV-DP08-F7.5-221K	Y5P	8	4	7.5	0.6
12	HVC-2KV-DP08-F7.5-331K	Y5P	8	4	7.5	0.6
13	HVC-2KV-DP08-F7.5-471K	Y5P	8	4	7.5	0.6
14	HVC-2KV-DP08-F7.5-561K	Y5P	8	4	7.5	0.6
15	HVC-2KV-DP08-F7.5-681K	Y5P	8	4	7.5	0.6
16	HVC-2KV-DP08-F7.5-102K	Y5P	8	4	7.5	0.6
17	HVC-2KV-DP08-F10-222K	Y5P	8	4	10	0.6
18	HVC-2KV-E07-F7.5-222M	Y5U	7	4	7.5	0.6
19	HVC-2KV-DP14-F10-332K	Y5P	14	4	10	0.6
20	HVC-2KV-E11-F10-332M	Y5U	11	4	10	0.6
21	HVC-2KV-DP14-F10-472K	Y5P	14	4	10	0.6
22	HVC-2KV-E11-F10-472M	Y5U	11	4	10	0.6
23	HVC-2KV-DP17-F10-103K	Y5P	17	4	10	0.8
24	HVC-2KV-E14-F10-103M	Y5U	14	4	10	0.6
25	HVC-2KV-F09-F10-103Z	Y5V	9	4	10	0.6
26	HVC-3KV-SL08-F7.5-10PK	SL	8	4.5	7.5	0.6
27	HVC-3KV-SL08-F7.5-15PK	SL	8	4.5	7.5	0.6
28	HVC-3KV-SL08-F7.5-22PK	SL	8	4.5	7.5	0.6
29	HVC-3KV-SL08-F7.5-27PK	SL	8	4.5	7.5	0.6
30	HVC-3KV-SL08-F7.5-33PK	SL	8	4.5	7.5	0.6
31	HVC-3KV-SL08-F7.5-47PK	SL	8	4.5	7.5	0.6
32	HVC-3KV-SL08-F7.5-56PK	SL	8	4.5	7.5	0.6
33	HVC-3KV-SL08-F7.5-68PK	SL	8	4.5	7.5	0.6
34	HVC-3KV-SL08-F7.5-101K	SL	8	4.5	7.5	0.6
35	HVC-3KV-DP06-F5-101K	Y5P	6	4	5	0.6
36	HVC-3KV-DP08-F10-151K	Y5P	8	4.5	10	0.6
37	HVC-3KV-DP08-F10-221K	Y5P	8	4.5	10	0.6
38	HVC-3KV-DP08-F10-331K	Y5P	8	4.5	10	0.6
39	HVC-3KV-DP08-F10-471K	Y5P	8	4.5	10	0.6
40	HVC-3KV-DP08-F10-561K	Y5P	8	4.5	10	0.6
41	HVC-3KV-DP08-F10-681K	Y5P	8	4.5	10	0.6
42	HVC-3KV-DP08-F10-102K	Y5P	8	4.5	10	0.6
43	HVC-3KV-DP10-F10-222K	Y5P	10	4.5	10	0.6
44	HVC-3KV-E08-F10-222M	Y5U	8	4.5	10	0.6
45	HVC-3KV-DP14-F10-332K	Y5P	10	14	4.5	0.6
46	HVC-3KV-E08-F5-332M	Y5U	8	4.5	5	0.6

N0.	Part Number	Material	Max (mm)			
			D	T	P	d
47	HVC-3KV-DP14-F10-472K	Y5P	14	4.5	10	0.6
48	HVC-3KV-E10-F10-472M	Y5U	10	4.5	10	0.6
49	HVC-3KV-E17-F10-103M	Y5U	17	4.5	10	0.65
50	HVC-3KV-F11-F10-103M	Y5V	11	4.5	10	0.6
51	HVC-6KV-N09-F10-10PK	NP0	9	6	10	0.6
52	HVC-6KV-SL08-F10-10PK	SL	8	5	10	0.6
53	HVC-6KV-SL08-F10-22PK	SL	8	5	10	0.6
54	HVC-6KV-SL08-F10-33PK	SL	8	5	10	0.6
55	HVC-6KV-SL08-F10-47PK	SL	9	5	10	0.6
56	HVC-6KV-SL09-F10-101K	SL	9	6	10	0.6
57	HVC-6KV-DL06-F5-101K	N4700	6	4	5	0.5
58	HVC-6KV-DP09-F10-101K	Y5P	9	5	10	0.6
59	HVC-6KV-DP09-F10-221K	Y5P	9	5	10	0.6
60	HVC-6KV-DL08-F10-221K	N4700	10	6	10	0.6
61	HVC-6KV-DP09-F10-331K	Y5P	9	5	10	0.6
62	HVC-6KV-DL10-F10-331K	N4700	10	5	10	0.6
63	HVC-6KV-DP09-F10-471K	Y5P	9	5	10	0.6
64	HVC-6KV-DL11-F10-471K	N4700	11	5	10	0.6
65	HVC-6KV-DP11-F10-102K	Y5P	11	5	10	0.6
66	HVC-6KV-D11-F10-102K	Y5T	11	6	10	0.6
67	HVC-6KV-E08-F10-102M	Y5U	8	5	10	0.6
68	HVC-6KV-D16-F10-222K	Y5T	16	5	10	0.6
69	HVC-6KV-E10-F10-222M	Y5U	10	5	10	0.6
70	HVC-6KV-DL08-F10-221K	N4700	8	6	10	0.6
71	HVC-6KV-DL14-F10-102K	N4700	14	6	10	0.6
72	HVC-6KV-DL10-F10-471K	N4700	10	6	10	0.6
73	HVC-6KV-E15-F10-332M	Y5U	15	5	10	0.6
74	HVC-6KV-E17-F10-472M	Y5U	17	5	10	0.6
75	HVC-6KV-E23-F12.5-103M	Y5U	23	6	12.5	0.8
76	HVC-6KV-F19-F9.5-103M	Y5V	19	6	10	0.65
77	HVC-10KV-D06-F7.5-101K	Y5T	6	5	7.5	0.65
78	HVC-10KV-DL07-F10-101K	N4700	7	7	10	0.65
79	HVC-10KV-D08-F7.5-151K	Y5T	7	6	7.5	0.65
80	HVC-10KV-DL08-F10-151K	N4700	8	7	10	0.65
81	HVC-10KV-D08-F7.5-221K	Y5T	8	5.5	7.5	0.65
82	HVC-10KV-DL08-F10-221K	UJ	9	5	9.5	0.6
83	HVC-10KV-D08-F7.5-331K	Y5T	8	6	7.5	0.65
84	HVC-10KV-DL08-F10-331K	N4700	10	6.5	10	0.65
85	HVC-10KV-D09-F10-471K	Y5T	9	6	10	0.65
86	HVC-10KV-DL12-F10-471K	N4700	12	7	10	0.8
87	HVC-10KV-D10-F10-681K	Y5T	10	6	10	0.65
88	HVC-10KV-DL15-F10-681K	N4700	15	7	10	0.8
89	HVC-10KV-D14-F10-102K	Y5T	14	7	10	0.8
90	HVC-10KV-DL16-F10-102K	N4700	16	7	10	0.8
91	HVC-10KV-D17-F10-222K	Y5T	17	7	10	0.8
92	HVC-10KV-E14-F10-222M	Y5U	14	7	10	0.8

Ceramic Disc Capacitors Class 1 and 2, 1 kV_{DC} to 50 kV_{DC} , General Purpose

N0.	Part Number	Material	Max (mm)			
			D	T	P	d
93	HVC-10KV-D21-F12.5-332K	Y5T	21	7	12.5	0.8
94	HVC-10KV-E16-F10-332M	Y5U	16	7	10	0.8
95	HVC-10KV-E20-F12.5-472M	Y5U	20	7	12.5	0.8
96	HVC-10KV-F17-F12.5-682Z	Y5V	17	8	12.5	0.8
97	HVC-10KV-E33-F20-103M	Y5U	33	9	20	0.8
98	HVC-10KV-F21-F12.5-103Z	Y5V	21	7	12.5	0.8
99	HVC-10KV-D21-F12.5-332M	Y5T	24	8.5	12.5	0.8
100	HVC-15KV-D07-F7.5-101K	Y5T	7	7	7.5	0.65
101	HVC-15KV-DL07-F10-101K	N4700	7	7	10	0.65
102	HVC-15KV-DL09-F10-151K	N4700	9	7	10	0.65
103	HVC-15KV-D08-F7.5-221K	Y5T	8	7	7.5	0.65
104	HVC-15KV-DL10-F10-221K	N4700	10	7	10	0.65
105	HVC-15KV-D08-F7.5-331K	Y5T	8	7	7.5	0.65
106	HVC-15KV-DL12-F10-331K	N4700	12	8	10	0.65
107	HVC-15KV-D09-F10-471K	Y5T	9	7	10	0.65
108	HVC-15KV-DL14-F10-471K	N4700	14	8	10	0.8
109	HVC-15KV-D11-F10-681K	Y5T	11	7	10	0.65
110	HVC-15KV-DL16-F10-681K	N4700	16	8	12.5	0.8
111	HVC-15KV-D13-F10-102K	Y5T	13	7	10	0.8
112	HVC-15KV-DL18-F12.5-102K	N4700	18	8	12.5	0.8
113	HVC-15KV-D19-F12.5-222K	Y5T	19	8	12.5	0.8
114	HVC-15KV-DL26-F12.5-202K	N4700	26	8	12.5	0.8
115	HVC-15KV-DL26-F12.5-222K	N4700	26	10	12.5	0.8
116	HVC-15KV-E21-F12.5-472M	Y5U	21	7	12.5	0.8
117	HVC-15KV-F18-F12.5-682Z	Y5V	18	8	12.5	0.8
118	HVC-15KV-F23-F12.5-103Z	Y5V	23	8	12.5	0.8
119	HVC-20KV-D07-F7.5-101K	Y5T	7	8	7.5	0.65
120	HVC-20KV-DL08-F10-101K	N4700	8	8	10	0.65
121	HVC-20KV-DL11-F10-151K	N4700	11	8	10	0.65
122	HVC-20KV-D07-F7.5-221K	Y5T	7	7	7.5	0.65
123	HVC-20KV-DL12-F10-221K	N4700	12	8	10	0.65
124	HVC-20KV-D09-F7.5-331K	Y5T	9	7	7.5	0.65
125	HVC-20KV-DL13-F10-331K	N4700	13	9	10	0.65
126	HVC-20KV-D11-F10-471K	Y5T	11	8	10	0.65
127	HVC-20KV-DL16-F10-471K	N4700	16	9	10	0.8
128	HVC-20KV-D12-F10-501K	Y5T	12	8	10	0.65
129	HVC-20KV-D13-F10-681K	Y5T	13	8.5	10	0.65
130	HVC-20KV-D15-F10-102K	Y5T	15	8.5	10	0.8
131	HVC-20KV-D17-F12.5-102K	Y5T	17	9	12.5	0.8
132	HVC-20KV-D20-F12.5-102K	Y5T	20	8	12.5	0.8
133	HVC-20KV-E12-F10-102K	Y5U	12	8	10	0.65
134	HVC-20KV-DL21-F12.5-102K	N4700	21	10	12.5	0.8
135	HVC-20KV-DL28-F16-202K	N4700	28	10	16	0.8
136	HVC-20KV-DL28-F16-222K	N4700	28	10	16	0.8
137	HVC-20KV-D18-F10-152K	Y5T	18	8.5	10	0.8
138	HVC-20KV-D21-F12.5-222K	Y5T	21	8.5	12.5	0.8
139	HVC-20KV-E21-F12.5-332M	Y5U	21	8.5	12.5	0.8
140	HVC-20KV-E23-F12.5-472M	Y5U	23	8.5	12.5	0.8

N0.	Part Number	Material	Max (mm)			
			D	T	P	d
141	HVC-20KV-F20-F12.5-682Z	Y5V	20	9	12.5	0.8
142	HVC-20KV-F24-F12.5-103Z	Y5V	40	22	20	1.2
143	HVC-25KV-D09-F7.5-221K	Y5T	9	8.5	7.5	0.65
144	HVC-25KV-D10-F10-331K	Y5T	10	8.5	10	0.65
145	HVC-25KV-D11-F10-471K	Y5T	11	8.5	10	0.65
146	HVC-25KV-D13-F10-681K	Y5T	13	9	10	0.65
147	HVC-25KV-D16-F12.5-102K	Y5T	16	9	12.5	0.8
148	HVC-25KV-D22-F12.5-222K	Y5T	22	10	12.5	0.8
149	HVC-25KV-F17-F12.5-472Z	Y5V	17	9	12.5	0.8
150	HVC-25KV-F25-F16-103Z	Y5V	25	10.5	16	0.8
151	HVC-30KV-D08-F10-101K	Y5T	8	9	10	0.65
152	HVC-30KV-DL10-F10-101K	N4700	10	10	10	0.8
153	HVC-30KV-D10-F15-151K	Y5T	10	11	15	0.8
154	HVC-30KV-DL10-F10-151K	N4700	10	9	10	0.8
155	HVC-30KV-D11-F15-221K	Y5T	11	11	15	0.8
156	HVC-30KV-DL13-F12.5-221K	N4700	13	9	12.5	0.8
157	HVC-30KV-D11-F10-331K	Y5T	11	10	10	0.8
158	HVC-30KV-DL15-F10-331K	N4700	15	11	10	0.8
159	HVC-30KV-D12-F12.5-471K	Y5T	12	10	12.5	0.8
160	HVC-30KV-DL20-F12.5-471K	N4700	20	11	12.5	0.8
161	HVC-30KV-DL20-F12.5-501K	N4700	20	12	16	0.8
162	HVC-30KV-DL19-F17.5-501K	N4700	19	11	17.5	0.8
163	HVC-30KV-D14-F12.5-681K	Y5T	14	10	12.5	0.8
164	HVC-30KV-D17-F12.5-102K	Y5T	17	10.5	12.5	0.8
165	HVC-30KV-DL28-F17.5-102K	N4700	28	15	17.5	1.0
166	HVC-30KV-D24-F14-222K	Y5T	24	10.5	14	1.0
167	HVC-30KV-D26-F18-222K	Y5T	26	13	18	1.0
168	HVC-30KV-E23-F13-332M	Y5U	23	13	13	0.8
169	HVC-30KV-F23-F15-472Z	Y5V	23	13	15	0.8
170	HVC-30KV-F28-F16-103Z	Y5V	28	12	16	0.8
171	HVC-30KV-F31-F16-103Z	Y5V	31	15	16	0.8
172	HVC-40KV-D08-F10-101K	Y5T	8	12	10	0.8
173	HVC-40KV-DL11-F10-101K	N4700	11	12	10	0.8
174	HVC-40KV-DL16-F12.5-221K	N4700	16	13	12.5	0.8
175	HVC-40KV-D10-F10-251K	Y5T	10	12	12.5	0.8
176	HVC-40KV-D15-F15-471K	Y5T	15	13.5	15	0.8
177	HVC-40KV-DL25-F16-501K	N4700	25	17	16	1.0
178	HVC-40KV-D19-F14-102K	Y5T	19	13	14	0.8
179	HVC-40KV-DL32-F20-102K K	N4700	32	16	20	1.2
180	HVC-50KV-SL15-F12.5-22PK	SL	15	17	12.5	0.8
181	HVC-50KV-SL16-F12.5-50P	SL	16	17	12.5	0.8
182	HVC-50KV-DL12-F10-101K	N4700	12	13	12.5	0.8
183	HVC-50KV-D11-F16-251K	Y5T	11	14	16	0.8
184	HVC-50KV-D16-F16-471K	Y5T	16	16	16	0.8
185	HVC-50KV-DL27-F16-501K	N4700	27	19	16	1.2
186	HVC-50KV-D22-F16-102K	Y5T	22	18	16	0.8
187	HVC-50KV-DL34-F18-102K	N4700	34	19	18	1.2
188	HVC-50KV-E26-F20-222M	Y5U	26	19	20	1.2