

Ultra high voltage ceramic capacitors For high voltage power supplies/lasers

UHV series



FEATURES

- Lineup of rated voltage Edc: 20 to 50kV
- Low ESR, low loss and low distortion factor
- Molded type metal screw terminals for easy mounting
- Uses high-reliability mold resin

APPLICATION

High-voltage power circuits (for medical devices, lithography, industrial analyzers)

PART NUMBER CONSTRUCTION

607	11	ZT	201	K	4D	D	A
Product category	Internal code	Temperature characteristic	Nominal capacitance	Capacitance tolerance	Rated voltage	Voltage classification	Insulation structure
Ultra high voltage ceramic capacitors		ZT Z5T(+10 to +85°C, +22,-33%)	201 200pF 941 940pF 252 2500pF 402 4000pF	K ±10%	4D 20kV 4F 30kV 4G 40kV 4H 50kV	D DC voltage specification	A Mold type

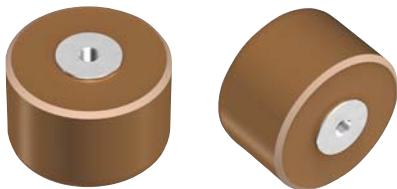
* Please refer to P-3 about the product dimensions.

OPERATING TEMPERATURE RANGE

Series	Operating temperature(°C)	Storage temperature(°C)
UHV	-30 to +85	-30 to +85

The maximum operating temperature of +85°C includes capacitor self-generated heat of up to 20°C.

PRODUCT APPEARANCE



UHV series

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

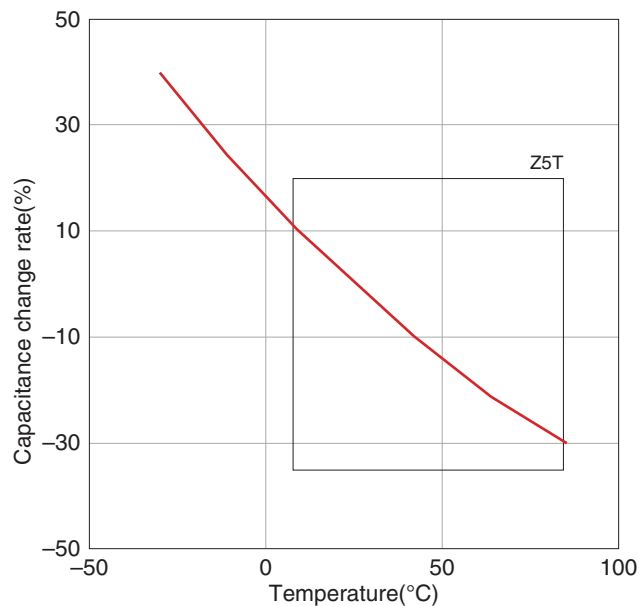
Class 2 (Temperature stable)

Temperature characteristic: Z5T (+10 to +85°C, +22,33%)

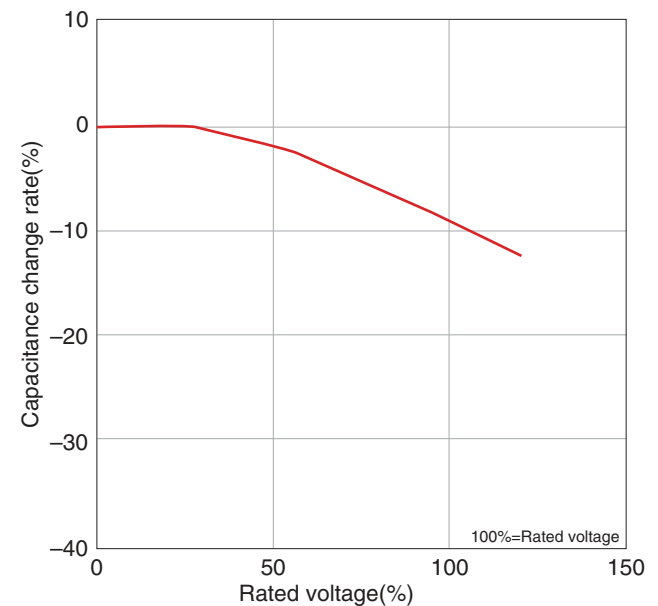
Part numbers	Sub part numbers	Rated voltage	Capacitance	Withstanding voltage	Dissipation factor(tanδ) (%) max.	Insulation resistance (MΩ) min.	AC corona starting voltage [3pC*] (kVAC) min.
		(kVDC)	(pF)	[1min. insulating liquid] (kVDC)			
60711ZT201K4DDA	UHV-221A	20	200±10%	30	0.1	10,000	10
60716ZT401K4DDA	UHV-222A	20	400±10%	30	0.1	10,000	10
60721ZT701K4DDA	UHV-223A	20	700±10%	30	0.1	10,000	10
60725ZT102K4DDA	UHV-224A	20	1000±10%	30	0.1	10,000	10
60729ZT142K4DDA	UHV-1A	20	1400±10%	30	0.1	10,000	10
60739ZT252K4DDA	UHV-2A	20	2500±10%	30	0.1	10,000	10
60750ZT402K4DDA	UHV-3A	20	4000±10%	30	0.1	10,000	10
60713ZT201K4FDA	UHV-231A	30	200±10%	45	0.1	10,000	15
60719ZT401K4FDA	UHV-232A	30	400±10%	45	0.1	10,000	15
60725ZT701K4FDA	UHV-233A	30	700±10%	45	0.1	10,000	15
60729ZT941K4FDA	UHV-4A	30	940±10%	45	0.1	10,000	15
60739ZT172K4FDA	UHV-5A	30	1700±10%	45	0.1	10,000	15
60750ZT272K4FDA	UHV-6A	30	2700±10%	45	0.1	10,000	15
60711ZT101K4GDA	UHV-241A	40	100±10%	60	0.1	10,000	20
60716ZT201K4GDA	UHV-242A	40	200±10%	60	0.1	10,000	20
60722ZT401K4GDA	UHV-243A	40	400±10%	60	0.1	10,000	20
60729ZT701K4GDA	UHV-7A	40	700±10%	60	0.1	10,000	20
60739ZT132K4GDA	UHV-8A	40	1300±10%	60	0.1	10,000	20
60750ZT202K4GDA	UHV-9A	40	2000±10%	60	0.1	10,000	20
60712ZT101K4HDA	UHV-251A	50	100±10%	75	0.1	10,000	25
60718ZT201K4HDA	UHV-252A	50	200±10%	75	0.1	10,000	25
60726ZT401K4HDA	UHV-253A	50	400±10%	75	0.1	10,000	25
60729ZT561K4HDA	UHV-10A	50	560±10%	75	0.1	10,000	25
60739ZT102K4HDA	UHV-11A	50	1000±10%	75	0.1	10,000	25
60750ZT172K4HDA	UHV-12A	50	1700±10%	75	0.1	10,000	25

* pC : Pico coulomb

TEMPERATURE CHARACTERISTIC

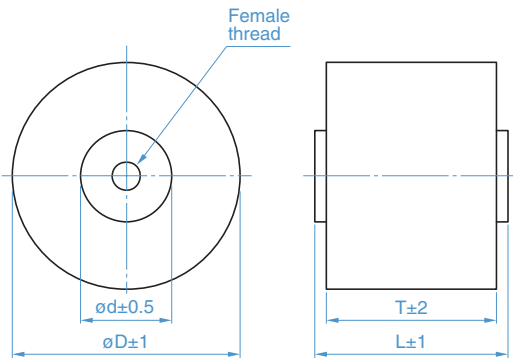


DC VOLTAGE CHARACTERISTIC



UHV series

SHAPE & DIMENSIONS



Effective female thread depth 5+1/0mm

MARKINGS

UHV-5A	Sub part number
172K	Nominal capacitance and tolerance code
DC30kV	Rated voltage
TDK	Manufacturer's name (TDK or TDK logo mark)
1234	Lot number

Part numbers	Sub part numbers	$\varnothing D$ (mm)	$\varnothing d$ (mm)	T (mm)	L (mm)	Internal screw
60711ZT201K4DDA	UHV-221A	20	6	19	23	ISO M4
60716ZT401K4DDA	UHV-222A	25	8	19	23	ISO M4
60721ZT701K4DDA	UHV-223A	30	10	19	23	ISO M4
60725ZT102K4DDA	UHV-224A	34	10	19	23	ISO M4
60729ZT142K4DDA	UHV-1A	38	15	19	23	ISO M5
60739ZT252K4DDA	UHV-2A	48	15	19	23	ISO M5
60750ZT402K4DDA	UHV-3A	60	15	19	23	ISO M5
60713ZT201K4FDA	UHV-231A	25	8	22	26	ISO M4
60719ZT401K4FDA	UHV-232A	30	10	22	26	ISO M4
60725ZT701K4FDA	UHV-233A	34	10	22	26	ISO M4
60729ZT941K4FDA	UHV-4A	38	15	22	26.2	ISO M5
60739ZT172K4FDA	UHV-5A	48	15	22	26	ISO M5
60750ZT272K4FDA	UHV-6A	60	15	22	26	ISO M5
60711ZT101K4GDA	UHV-241A	20	6	28	32	ISO M4
60716ZT201K4GDA	UHV-242A	25	8	28	32	ISO M4
60722ZT401K4GDA	UHV-243A	34	10	28	32	ISO M4
60729ZT701K4GDA	UHV-7A	38	15	28	32	ISO M5
60739ZT132K4GDA	UHV-8A	48	15	28	32	ISO M5
60750ZT202K4GDA	UHV-9A	60	15	28	32	ISO M5
60712ZT101K4HDA	UHV-251A	20	6	31	35	ISO M4
60718ZT201K4HDA	UHV-252A	30	10	31	35	ISO M4
60726ZT401K4HDA	UHV-253A	34	10	31	35	ISO M4
60729ZT561K4HDA	UHV-10A	38	15	31	35	ISO M5
60739ZT102K4HDA	UHV-11A	48	15	31	35.2	ISO M5
60750ZT172K4HDA	UHV-12A	60	15	31	35	ISO M5

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products.

REMINDERS

(1) During transportation and storage

- Do not transport or store where the products will be exposed to high temperature or high humidity.
- Do not expose to poisonous gases such as H₂SO₄, HCl, or HNO₃.
- Avoid excessive impact such as that caused by falling.

(2) During operation

- Avoid contact with electrolytes such as perspiration. Do not touch with bare hands.
- Avoid excessive impact such as that caused by falling.
- Do not apply solder to stud terminals.
- Do not re-machine the terminals.

(3) Usage

- Make sure that the products are not exposed to radiant heat from chambers or transformers.
- Please contact us when using in SF₆ gas.

(4) Others

The products listed on this catalog are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

(1) Aerospace/aviation equipment

(2) Transportation equipment (cars, electric trains, ships, etc.)

(3) Medical equipment (excepting Pharmaceutical Affairs Law classification Class1,2)

(4) Power-generation control equipment

(5) Atomic energy-related equipment

(6) Seabed equipment

(7) Transportation control equipment

(8) Public information-processing equipment

(9) Military equipment

(10) Electric heating apparatus, burning equipment

(11) Disaster prevention/crime prevention equipment

(12) Safety equipment

(13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.