

# 15DK, 20DK, 30DK, 40DK, 10KT, 15KT, 20KT, 30KT, 40KT Series



Vishay Cera-Mite

## Heavy Duty High Voltage Capacitors

### 10 TO 40KV MOLDED EPOXY CASE DK GENERAL PURPOSE TYPE, EIA CLASS III

#### APPLICATIONS:

- High Voltage Power Supplies, CRTs, Lasers.
- Smallest Size Available.

### KT SPECIAL PURPOSE TYPE, EIA CLASS I

#### APPLICATIONS:

- High Voltage Power Supplies, CRTs, Lasers.
- Greater Capacitance Stability.
- Features Low DF and Low Heating, Low DC & AC Voltage Coefficient.
- Tighter Tolerance On Capacitance.
- Highest AC Voltage Ratings.

### PERFORMANCE CHARACTERISTICS:

**Operating Temperature Range:** -30°C to +85°C

**Storage Temperature Range:** -40°C to +100°C

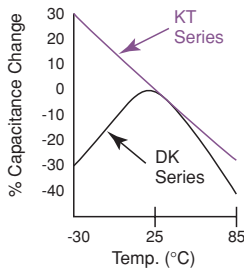
**Dielectric Strength:** 150% of rated voltage, charging current limited to 50mA.

**Insulation Resistance:** 200,000 megohms or 1000ΩF minimum at 25°C.

**Corona Limit:** 50 picocoulombs at rated AC voltage.

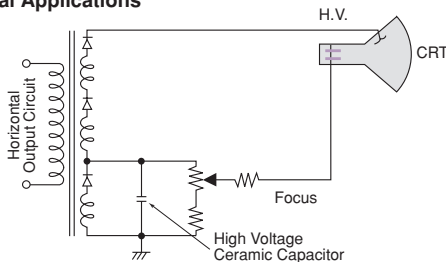
**Self Resonant Frequency:** Ranges from 50 MHz for small diameters to 10 MHz for large diameters.

**Power Dissipation:** Limit to 25°C rise above ambient, measured on case.



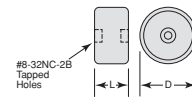
KT Series ceramic material is specially designed to handle AC current, due to low dissipation factor.

#### Typical Applications



Applications where high dv/dt is present will operate at high peak currents ( $I_p = dv/dt \times C$ ). Capacitors should be evaluated in the actual circuit for dv/dt greater than 2000V/ microsecond. If repetitive, it may be necessary to use a series resistor or other impedance to limit peak currents to safe values.

Fig 17



NOTE: Screw torque limit: 12 inch pounds. Use #8-32, 3/16" long screw to prevent bottoming.

D SIZE CODE	DIAMETER MAX.	
	in.	mm
A	.880	22.4
B	1.05	26.7
C	1.30	33.0
D	1.55	39.4
E	1.80	45.7
F	2.13	54.1
G	2.30	58.4
H	2.42	61.5

L SIZE CODE	LENGTH MAX.	
	in.	mm
J	.780	19.8
K	.900	22.9
L	1.00	25.4
M	1.18	30.0
N	1.36	34.5

715C Series

**TYPE DK CAPACITOR**  
Class III Y5U Temp. Coefficient  
Cap Tol. +80% - 20%  
DF: 2% Max @ 1 kHz

**15,000 VDC; 4,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
1500	15DKD15	B	K
2000	15DKD20	C	K
3300	15DKD33	D	K
4700	15DKD47	D	K
.01 uF	15DKS10	G	K

**20,000 VDC; 5,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
500	20DKT50	A	L
1000	20DKD10	C	L
1300	20DKD13	C	L
2500	20DKD25	D	L
3300	20DKD33	E	L
4700	20DKD47	F	L
6800	20DKD68	H	L

**30,000 VDC; 7,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
500	30DKT50	B	N
1000	30DKD10	C	M
2500	30DKD25	D	M
3300	30DKD33	F	M
4700	30DKD47	G	M

**40,000 VDC; 9,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
300	40DKT30	A	N
500	40DKT50	B	N
780	40DKT78	C	N
1000	40DKD10	D	N
1600	40DKD16	E	N
2500	40DKD25	F	N
3300	40DKD33	G	N

**TYPE KT CAPACITOR**  
Class I N4700 Temp. Coefficient  
Cap Tol. ±20%  
DF: 0.2% Max @ 1 kHz

**10,000 VDC; 4,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
1000	10KTD10	C	J
2200	10KTD22	D	J
3900	10KTD39	F	J
4700	10KTD47	G	J

**15,000 VDC; 6,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
820	15KTT82	C	K
1900	15KTD19	F	K
3300	15KTD33	G	K

**20,000 VDC; 8,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
560	20KTT56	C	L
1000	20KTD10	D	L
1900	20KTD19	F	L
2700	20KTD27	H	L

**30,000 VDC; 10,000 VRMS, 60HZ**

CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
400	30KTT40	C	M
660	30KTT66	D	M
1200	30KTD12	F	M
1800	30KTD18	H	M

**40,000 VDC; 13,000 VRMS, 60HZ**

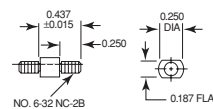
CAP pF	CATALOG NUMBER	SIZE	
		D CODE	L CODE
300	40KTT30	C	N
640	40KTT64	E	N
1000	40KTD10	F	N
1300	40KTD13	H	N

### TERMINAL ADAPTORS

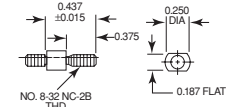
#8-32NC-2B Adapters.  
Order separately as required.

All tolerances ±0.010 unless specified.

#### 75-134A



#### 75-135A



#### 75-136A

