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

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# **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  $1000\Omega F$ 

minimum at 25°C.

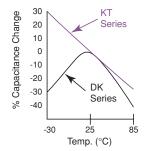
Corona Limit: 50 picocoulombs at rated AC voltage.

Self Resonant Frequency: Ranges from 50 MHz for small

diameters to 10 MHz for large diameters.

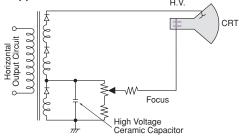
Power Dissipation: Limit to 25°C rise above ambient,

measured on case.



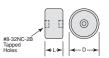
KT Series ceramic material is specially designed to handle AC current, due to low dissipation factor.

#### **Typical Applications**



Applications where high dv/dt is present will operate at high peak currents (Ip = dv/dt x 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<br>SIZE       | DIAMETER<br>MAX.   |  |
|-----------------|--|--|
| CODE            | in.  | mm   |
| A B C D E F G H | .880<br>1.05<br>1.30<br>1.55<br>1.80<br>2.13<br>2.30<br>2.42 | 22.4<br>26.7<br>33.0<br>39.4<br>45.7<br>54.1<br>58.4<br>61.5 |

| L<br>SIZE             |                                      | NGTH<br>NAX.                         |
|-----------------------|--------------------------------------|--------------------------------------|
| CODE                  | in.                                  | mm                                   |
| J<br>K<br>L<br>M<br>N | .780<br>.900<br>1.00<br>1.18<br>1.36 | 19.8<br>22.9<br>25.4<br>30.0<br>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    | CATALOG | SI     | ZE     |
|--------|---------|--------|--------|
| pF     | NUMBER  | D CODE | L CODE |
| 1500   | 15DKD15 | В      | K      |
| 2000   | 15DKD20 | С      | K      |
| 3300   | 15DKD33 | D      | K      |
| 4700   | 15DKD47 | D      | K      |
| .01 uF | 15DKS10 | G      | K      |

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

| Г | CAP  | CATALOG | SI     | SIZE   |  |
|---|------|---------|--------|--------|--|
| l | pF   | NUMBER  | D CODE | L CODE |  |
| Г | 500  | 20DKT50 | Α      | L      |  |
| l | 1000 | 20DKD10 | С      | L      |  |
| l | 1300 | 20DKD13 | С      | L      |  |
| l | 2500 | 20DKD25 | D      | L      |  |
| l | 3300 | 20DKD33 | E      | L      |  |
| l | 4700 | 20DKD47 | F      | L      |  |
|   | 6800 | 20DKD68 | Н      | L      |  |

#### 30.000 VDC: 7.000 VRMS, 60HZ

| CAP  | CAP CATALOG SIZE |        | ZE     |
|------|------------------|--------|--------|
| pF   | NUMBER           | D CODE | L CODE |
| 500  | 30DKT50          | В      | N      |
| 1000 | 30DKD10          | С      | M      |
| 2500 | 30DKD25          | D      | M      |
| 3300 | 30DKD33          | F      | M      |
| 4700 | 30DKD47          | G      | M      |

#### 40,000 VDC: 9,000 VRMS, 60HZ

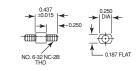
| CAP  | CATALOG | SIZE   |        |
|------|---------|--------|--------|
| pF   | NUMBER  | D CODE | L CODE |
| 300  | 40DKT30 | Α      | N      |
| 500  | 40DKT50 | В      | N      |
| 780  | 40DKT78 | С      | N      |
| 1000 | 40DKD10 | D      | N      |
| 1600 | 40DKD16 | Е      | N      |
| 2500 | 40DKD25 | F      | N      |
| 3300 | 40DKD33 | G      | N      |

## **TERMINAL ADAPTORS** 75-135A

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

All tolerances ±0.010 unless specified.

#### 75-134A



## **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  | CATALOG | SIZE   |        |
|------|---------|--------|--------|
| PF   |         | D CODE | L CODE |
| 1000 | 10KTD10 | С      | J      |
| 2200 | 10KTD22 | D      | J      |
| 3900 | 10KTD39 | F      | J      |
| 4700 | 10KTD47 | G      | J      |

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

| CAP  | CATALOG | SI     | ZE     |
|------|---------|--------|--------|
| pF   |         | D CODE | L CODE |
| 820  | 15KTT82 | С      | K      |
| 1900 | 15KTD19 | F      | K      |
| 3300 | 15KTD33 | G      | K      |

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

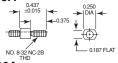
| CAP  | CATALOG | SI     | ZE     |
|------|---------|--------|--------|
| рF   | NUMBER  | D CODE | L CODE |
| 560  | 20KTT56 | С      | L      |
| 1000 | 20KTD10 | D      | L      |
| 1900 | 20KTD19 | F      | L      |
| 2700 | 20KTD27 | Н      | L      |

### 30,000 VDC: 10,000 VRMS, 60HZ

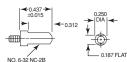
| ,    | ,,      |        | ,      |
|------|---------|--------|--------|
| CAP  | NUMBER  | SI     | ZE     |
| рF   |         | D CODE | L CODE |
| 400  | 30KTT40 | С      | М      |
| 660  | 30KTT66 | D      | M      |
| 1200 | 30KTD12 | F      | M      |
| 1800 | 30KTD18 | Н      | М      |

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

| •    |         |        | ,      |
|------|---------|--------|--------|
| CAP  | CATALOG | SI     | ZE     |
| pF   | NUMBER  | D CODE | L CODE |
| 300  | 40KTT30 | С      | N      |
| 640  | 40KTT64 | E      | N      |
| 1000 | 40KTD10 | F      | N      |
| 1300 | 40KTD13 | H      | N      |



# 75-136A



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