

# HIGH-FREQ ALUMINUM ELECTROLYTIC

## HD SERIES

### SUBMINIATURE

#### (Radial Lead, Horizontal Deflection)

The NTE HD series of aluminum electrolytic non-polarized capacitors are designed specifically for horizontal deflection current correction where high frequency and high ripple current occur.

### RATINGS

**Capacitance Range:** 1.0 $\mu$ f to 10 $\mu$ f

**Tolerance:**  $\pm 20\%$

**Voltage Range:** 25 Volts and 50 Volts

### PERFORMANCE SPECIFICATIONS

#### Operating Temperature Range:

$-25^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  ( $-13^{\circ}\text{F}$  to  $+185^{\circ}\text{F}$ )

**Leakage Current:**  $I \leq 0.2CV$  (measured after 5 minutes of applied rated voltage)

I = Leakage Current ( $\mu\text{A}$ )

C = Nominal Capacitance ( $\mu\text{f}$ )

V = Rated Voltage (V)

**Capacitance Tolerance:**  $\pm 20\%$  (M)  
measured at  $+20^{\circ}\text{C}$  ( $+68^{\circ}\text{F}$ ), 1kHz

**Load Life:** 1000 Hrs @ 12V DC,  $+70^{\circ}\text{C}$  ( $+158^{\circ}\text{F}$ ),  
at specified ripple current

Leakage Current: Initial specified value or less

Dissipation Factor:  $< 200\%$  of specified value

Capacitance Change: Within  $\pm 15\%$  of initial value

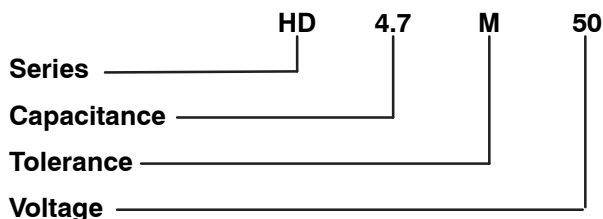
**Shelf Life:** 500 Hrs @  $+85^{\circ}\text{C}$  ( $+185^{\circ}\text{F}$ ),  
no voltage applied

Leakage Current: Initial specified value or less

Dissipation Factor:  $< 200\%$  of specified value

Capacitance Change: Within  $\pm 15\%$  of initial value

### ORDERING INFORMATION



### MECHANICAL SPECIFICATIONS

#### Lead Solderability:

Meets the requirements of MIL-STD 202,  
Method 208

### MECHANICAL SPECIFICATIONS (Cont'd)

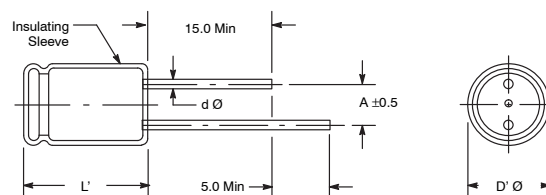
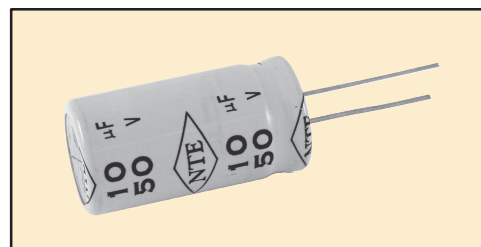
#### Marking:

Consists of series type, nominal capacitance, rated voltage, temperature range, anode and/or cathode identification, NTE identification.

#### Recommended Cleaning Solvents:

Methanol, isopropanol ethanol, isobutanol, petroleum ether, propanol and/or commercial detergents. Halogenated hydrocarbon cleaning agents such as Freon (MF, TF, or TC), trichloroethylene, trichloroethane, or methylchloride are not recommended as they may damage the capacitor.

### CASE SIZE AND DIMENSIONS:



### HD Series Dimensions:

#### Diameter (D Ø) x Length (L): mm

Capacitance ( $\mu\text{f}$ )	25V and 50V	Ripple Current* ( $A_{p-p}$ )
1.0	12.5 x 20	2.0
2.2	12.5 x 25	3.0
3.3	16 x 25	4.0
4.7	16 x 31.5	5.0
5.6	16 x 31.5	6.0
6.8	16 x 35.5	7.0
8.2	18 x 35.5	8.0
10.0	18 x 40	9.0

\* Allowable ripple current @  $70^{\circ}\text{C}$ , 12V DC, and 15.75kHz

### HD Mechanical Specs: Dimensions (mm)

Outside Diameter (D Ø)	12.5	16	18
Lead Spacing (A)	5.0	7.5	7.5
Lead Wire (d Ø)	0.6	0.8	0.8