

# 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°C to +85°C (-13°F to +185°F)
- Leakage Current:**  $I \leq 0.2CV$  (measured after 5 minutes of applied rated voltage)
  - I = Leakage Current ( $\mu$ A)
  - C = Nominal Capacitance ( $\mu$ f)
  - V = Rated Voltage (V)

**Capacitance Tolerance:**  $\pm 20\%$  (M)  
measured at +20°C (+68°F), 1kHz

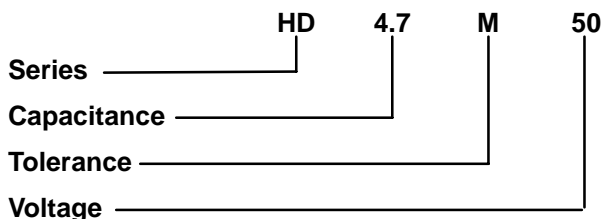
**Load Life:** 1000 Hrs @ 12V DC, +70°C (+158°F),  
at specified ripple current

- 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°C (+185°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

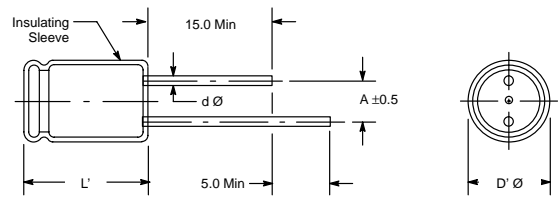
#### Marking:

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

#### Recommended Cleaning Solvents:

Methanol, isopropanol ethanol, isobutanol, petro-  
leum ether, propanol and/or commercial deter-  
gents. Halogenated hydrocarbon cleaning  
agents such as Freon (MF, TF, or TC), trichloroe-  
thylene, trichloroethane, or methylchloride are  
not recommended as they may damage the ca-  
pacitor.

### CASE SIZE AND DIMENSIONS:



### HD Series Dimensions:

Diameter (D Ø) x Length (L): mm

Capacitance ( $\mu$ 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°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