

# 105°C ALUMINUM ELECTROLYTIC

## VHT SERIES

### SUBMINIATURE (Radial Lead, 105°C Max)

The NTE VHT series of aluminum electrolytic capacitors are designed for use in automotive, commercial, and industrial applications. These high temperature, radial lead capacitors are especially suitable for applications that require extended life and higher temperature operation.

### RATINGS

**Capacitance Range:** 0.1 $\mu$ f to 4700 $\mu$ f

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

**Voltage Range:** 16 to 250 Volts

### PERFORMANCE SPECIFICATIONS

#### Operating Temperature Range:

-40°C to +105°C (-40°F to +220.9°F)

#### Leakage Current:

6.3V to 100V:  $\leq 0.01CV$  (+3 $\mu$ A)

160V to 250V:  $\leq 0.03CV$  (+15 $\mu$ A)

**Capacitance Tolerance:**  $\pm 20\%$  (M)  
measured at +20°C (+68°F), 120Hz

#### High Temperature Load Test:

1000 Hrs @ +105°C (+220.9°F) and rated voltage

#### Ripple Current:

The ripple current multipliers (See Table) adjust the current to make the capacitors operating temperature the same for different ambient temperatures and ripple frequencies.

Temperature	45°C	55°C	65°C	75°C	85°C	95°C	105°C
Multiplier	1.5	1.46	1.32	1.17	1.0	0.79	0.5

**Load Life:** 1000 Hrs @ +105°C (+220.9°F),  
no voltage applied

**Shelf Life:** 1000 Hrs @ +105°C (+220.9°F),  
no voltage applied

### MECHANICAL SPECIFICATIONS

#### Lead Solderability:

Meets the requirements of MIL-STD 202,  
Method 208

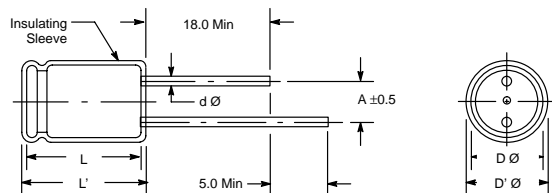
#### Marking:

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

#### Recommended Cleaning Solvents:

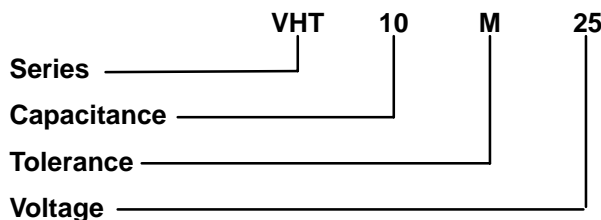
Methanol, isopropanol ethanol, isobutanol, petroleum ether, propanol and/or commercial detergents. Halogenated hydrocarbon cleaning agents such as Freon (MF, TF, or TC), trichloroethylene, trichloroethane, or methylchloride are not recommended as they may damage the capacitor.

### CASE SIZE AND DIMENSIONS:



$$D' \text{ } \varnothing = D \text{ } \varnothing + 0.5 \text{ Max} \quad L' = L + 1.0 \text{ Max at } D \text{ } \varnothing \leq 8.0 \quad L' = L + 2.0 \text{ Max at } D \text{ } \varnothing \geq 10.0$$

### ORDERING INFORMATION



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VHT Series Dimensions: Diameter (D Ø) x Length (L): mm

Cap (µf) \ WV	16	25	35	50	63	160	250
0.1				5 x 11			
0.22				5 x 11			
0.33				5 x 11			
0.47				5 x 11	5 x 11		
1.0				5 x 11	5 x 11	6 x 11	6 x 11
2.2				5 x 11	5 x 11	6 x 11	8 x 11.5
3.3				5 x 11	5 x 11	8 x 11.5	10 x 12.5
4.7		5 x 11	5 x 11	5 x 11	5 x 11	8 x 11.5	10 x 12.5
10	5 x 11	5 x 11	5 x 11	5 x 11	6 x 11	10 x 12.5	10 x 20
22	5 x 11	5 x 11	6 x 11	6 x 11	8 x 11.5	10 x 20	13 x 25
33	5 x 11	6 x 11	6 x 11	8 x 11.5	8 x 11.5	13 x 21	13 x 25
47	6 x 11	6 x 11	8 x 11.5	8 x 11.5	10 x 12.5	13 x 25	16 x 25
100	8 x 11.5	8 x 11.5	10 x 12.5	10 x 16	10 x 20	16 x 25	18 x 36
220	10 x 12.5	10 x 16	10 x 20	13 x 20	13 x 20		
330	10 x 16	10 x 20	13 x 20	13 x 20	13 x 25		
470	10 x 20	13 x 20	13 x 25	16 x 25	16 x 25		
1000	13 x 25	16 x 25	16 x 25	16 x 25	18 x 31.5		
2200	16 x 25	16 x 31.5	18 x 31.5				
3300	16 x 31.5	18 x 31.5					
4700	18 x 31.5						

\* These dimensions are for reference only, please consult the factory for actual size.

### VHT Mechanical Specs: Dimensions (mm)

Outside Diameter	D Ø	5.0	6.0	8.0	10.0	13.0	16.0	18.0
Lead Spacing	A	2.0	2.5	3.5	5.0		7.5	
Lead Wire	d Ø	0.5			0.6		0.65	0.8

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