



## Series HV1213TC Metallized Polypropylene

**Features:** Flame retardant to UL94, self healing, long life availability, limited AC applications.

**Construction:** Tubular with axial leads, polyester tape wrap, epoxy end fill, tinned solid copper clad wire leads, dry construction.

**Applications:** High voltage DC power supplies.

**Packaging:** Axial wrap and fill (TC).

### Specifications

**1) Temperature Range**

-55°C to 85°C at rated voltage.

**2) Capacitance Range**

0.001 $\mu$ F to 1 $\mu$ F

**3) Capacitance Tolerances**

5%, 10% or 20%.

**4) Dielectric Strength**

140% rated for 10 seconds minimum.

**5) Voltage Ratings**

2KVDC to 16KVDC. Higher ratings available with custom designs.

**6) Dissipation Factor**

Shall be 0.1% max. when measured at 1KHz and 25°C.

# Catalog Nomenclature

**\* 1 3 0 6 E F R - 3 - . 0 0 1 - 1 - 5**

**Case Code:**

TC - Wrap & Fill - Round - Axial  
 TF - Wrap & Fill - Flat - Axial  
 EC - Epoxy Case - Round - Axial  
 EFR - Epoxy Case - Flat - Radial  
 DFR - Dipped Construction - Flat - Radial  
 HS - Hermetically Sealed

**Dielectric Code:**

1206 - Polypropylene/Foil  
 1213 - Metallized Polypropylene  
 1306 - Polyester/Foil  
 1313 - Metallized Polyester  
 1613 - Metallized Polycarbonate  
 1906 - Polystyrene/Foil  
 2113 - Metallized Polyphenylene Sulfide

**Size Code:**

3 - Standard  
 2 - Miniature (1313DFR Series Only)  
 X - Non-standard  
 Or one letter case code

**Capacitance:**

In microfarads ( $\mu$ F)

**Voltage:**

.35 - 35 VDC  
 0 - 50 VDC  
 1 - 100 VDC  
 2 - 200 VDC  
 3 - 300 VDC  
 4 - 400 VDC  
 10 - 1000 VDC  
 1.6K - 1600VDC  
 Etc.

**Tolerance:**

1 - 1%  
 2 - 2%  
 5 - 5%  
 Etc.

**\* Options**

The following options are available from EFC by specifying the appropriate prefix.

- A - Aluminum foil electrodes
- T - Tin foil electrodes
- HV - High voltage DC applications
- AC - AC voltage rated applications
- MF - Metallized and foil hybrid for maximum pulse current applications
- M - Dual metallized design for pulse current applications
- SP - Low ESR, high RMS current applications
- PC - Direct mount terminals for high current filter applications
- FT - Feed thru filter applications
- RC - Resistor capacitor suppressors

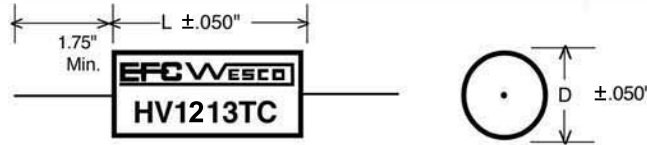


Please consult factory for special requirements, including non-standard values and sizes

# HV1213TC Tubular Wrap & Fill

# High Voltage Metallized Polypropylene Capacitors

**Lead Spec.**  
Tinned Copperweld  
Under .250D = 24 AWG  
.250 - .440D = 22AWG  
Above .440D = 20 AWG



## Dimensions and Ratings

2000 VDC				4000 VDC				6000 VDC			
Cap.	Part #	D	L	Cap.	Part #	D	L	Cap.	Part #	D	L
.001	HV1213TC-3-.001-2K-*	0.250	0.656	.001	HV1213TC-3-.001-4K-*	0.250	1.250	.001	HV1213TC-3-.001-6K-*	0.265	1.375
.0012	HV1213TC-3-.0012-2K-*	0.261	0.656	.0012	HV1213TC-3-.0012-4K-*	0.250	1.250	.0012	HV1213TC-3-.0012-6K-*	0.278	1.375
.0015	HV1213TC-3-.0015-2K-*	0.278	0.656	.0015	HV1213TC-3-.0015-4K-*	0.250	1.250	.0015	HV1213TC-3-.0015-6K-*	0.298	1.375
.0018	HV1213TC-3-.0018-2K-*	0.293	0.656	.0018	HV1213TC-3-.0018-4K-*	0.250	1.250	.0018	HV1213TC-3-.0018-6K-*	0.315	1.375
.0022	HV1213TC-3-.0022-2K-*	0.312	0.656	.0022	HV1213TC-3-.0022-4K-*	0.258	1.250	.0022	HV1213TC-3-.0022-6K-*	0.337	1.375
.0027	HV1213TC-3-.0027-2K-*	0.334	0.656	.0027	HV1213TC-3-.0027-4K-*	0.272	1.250	.0027	HV1213TC-3-.0027-6K-*	0.363	1.375
.0033	HV1213TC-3-.0033-2K-*	0.359	0.656	.0033	HV1213TC-3-.0033-4K-*	0.288	1.250	.0033	HV1213TC-3-.0033-6K-*	0.391	1.375
.0039	HV1213TC-3-.0039-2K-*	0.269	0.781	.0039	HV1213TC-3-.0039-4K-*	0.304	1.250	.0039	HV1213TC-3-.0039-6K-*	0.417	1.375
.0047	HV1213TC-3-.0047-2K-*	0.283	0.781	.0047	HV1213TC-3-.0047-4K-*	0.323	1.250	.0047	HV1213TC-3-.0047-6K-*	0.448	1.375
.0056	HV1213TC-3-.0056-2K-*	0.299	0.781	.0056	HV1213TC-3-.0056-4K-*	0.343	1.250	.0056	HV1213TC-3-.0056-6K-*	0.481	1.375
.0068	HV1213TC-3-.0068-2K-*	0.318	0.781	.0068	HV1213TC-3-.0068-4K-*	0.357	1.250	.0068	HV1213TC-3-.0068-6K-*	0.522	1.375
.0082	HV1213TC-3-.0082-2K-*	0.339	0.781	.0082	HV1213TC-3-.0082-4K-*	0.394	1.250	.0082	HV1213TC-3-.0082-6K-*	0.565	1.375
.01	HV1213TC-3-.01-2K-*	0.363	0.781	.01	HV1213TC-3-.01-4K-*	0.425	1.250	.01	HV1213TC-3-.01-6K-*	0.616	1.375
.012	HV1213TC-3-.012-2K-*	0.389	0.781	.012	HV1213TC-3-.012-4K-*	0.457	1.250	.012	HV1213TC-3-.012-6K-*	0.667	1.375
.015	HV1213TC-3-.015-2K-*	0.423	0.781	.015	HV1213TC-3-.015-4K-*	0.501	1.250	.015	HV1213TC-3-.015-6K-*	0.737	1.375
.018	HV1213TC-3-.018-2K-*	0.377	0.937	.018	HV1213TC-3-.018-4K-*	0.540	1.250	.018	HV1213TC-3-.018-6K-*	0.559	2.000
.022	HV1213TC-3-.022-2K-*	0.407	0.937	.022	HV1213TC-3-.022-4K-*	0.589	1.250	.022	HV1213TC-3-.022-6K-*	0.609	2.000
.027	HV1213TC-3-.027-2K-*	0.441	0.937	.027	HV1213TC-3-.027-4K-*	0.644	1.250	.027	HV1213TC-3-.027-6K-*	0.667	2.000
.033	HV1213TC-3-.033-2K-*	0.478	0.937	.033	HV1213TC-3-.033-4K-*	0.704	1.250	.033	HV1213TC-3-.033-6K-*	0.729	2.000
.039	HV1213TC-3-.039-2K-*	0.404	1.250	.039	HV1213TC-3-.039-4K-*	0.559	1.750	.039	HV1213TC-3-.039-6K-*	0.786	2.000
.047	HV1213TC-3-.047-2K-*	0.435	1.250	.047	HV1213TC-3-.047-4K-*	0.606	1.750	.047	HV1213TC-3-.047-6K-*	0.856	2.000
.056	HV1213TC-3-.056-2K-*	0.456	1.250	.056	HV1213TC-3-.056-4K-*	0.654	1.750	.056	HV1213TC-3-.056-6K-*	0.928	2.000
.068	HV1213TC-3-.068-2K-*	0.505	1.250	.068	HV1213TC-3-.068-4K-*	0.713	1.750	.068	HV1213TC-3-.068-6K-*	1.016	2.000
.082	HV1213TC-3-.082-2K-*	0.546	1.250	.082	HV1213TC-3-.082-4K-*	0.776	1.750	.082	HV1213TC-3-.082-6K-*	1.110	2.000
.1	HV1213TC-3-.1-2K-*	0.595	1.250	.1	HV1213TC-3-.1-4K-*	0.849	1.750	.1	HV1213TC-3-.1-6K-*	1.219	2.000
.12	HV1213TC-3-.12-2K-*	0.644	1.250	.12	HV1213TC-3-.12-4K-*	0.924	1.750	.12	HV1213TC-3-.12-6K-*	1.159	2.31
.15	HV1213TC-3-.15-2K-*	0.605	1.500	.15	HV1213TC-3-.15-4K-*	1.025	1.750	.15	HV1213TC-3-.15-6K-*	1.289	2.31
.18	HV1213TC-3-.18-2K-*	0.656	1.500	.18	HV1213TC-3-.18-4K-*	1.137	1.750	.18	HV1213TC-3-.18-6K-*	1.406	2.31
.22	HV1213TC-3-.22-2K-*	0.717	1.500	.22	HV1213TC-3-.22-4K-*	1.228	1.750	.22	HV1213TC-3-.22-6K-*	1.548	2.31
.27	HV1213TC-3-.27-2K-*	0.787	1.500	.27	HV1213TC-3-.27-4K-*	1.103	2.250				
.33	HV1213TC-3-.33-2K-*	0.763	1.750	.33	HV1213TC-3-.33-4K-*	1.213	2.250				
.39	HV1213TC-3-.39-2K-*	0.824	1.750	.39	HV1213TC-3-.39-4K-*	1.313	2.250				
.47	HV1213TC-3-.47-2K-*	0.897	1.750	.47	HV1213TC-3-.47-4K-*	1.435	2.250				
.56	HV1213TC-3-.56-2K-*	0.815	2.250	.56	HV1213TC-3-.56-4K-*	1.561	2.250				
.68	HV1213TC-3-.68-2K-*	0.891	2.250	.68	HV1213TC-3-.68-4K-*	1.511	2.750				
.82	HV1213TC-3-.82-2K-*	0.972	2.25	.82	HV1213TC-3-.82-4K-*	1.653	2.750				
1.0	HV1213TC-3-1.0-2K-*	1.066	2.25	1.0	HV1213TC-3-1.0-4K-*	1.819	2.750				

\* - Please insert appropriate tolerance code

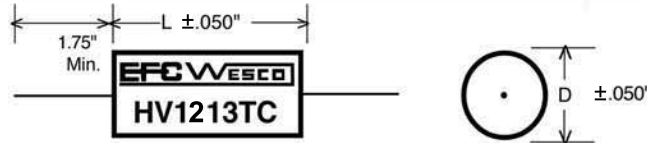


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## HV1213TC Tubular Wrap & Fill

## High Voltage Metallized Polypropylene Capacitors

Lead Spec.  
Tinned Copperweld  
Under .250D = 24 AWG  
.250 - .440D = 22AWG  
Above .440D = 20 AWG



# Dimensions and Ratings

Cap.	8000 VDC		
μF	Part #	D	L
.001	HV1213TC-3-.001-8K-*	0.305	1.812
.0012	HV1213TC-3-.0012-8K-*	0.320	1.812
.0015	HV1213TC-3-.0015-8K-*	0.342	1.812
.0018	HV1213TC-3-.0018-8K-*	0.362	1.812
.0022	HV1213TC-3-.0022-8K-*	0.387	1.812
.0027	HV1213TC-3-.0027-8K-*	0.416	1.812
.0033	HV1213TC-3-.0033-8K-*	0.448	1.812
.0039	HV1213TC-3-.0039-8K-*	0.477	1.812
.0047	HV1213TC-3-.0047-8K-*	0.514	1.812
.0056	HV1213TC-3-.0056-8K-*	0.552	1.812
.0068	HV1213TC-3-.0068-8K-*	0.598	1.812
.0082	HV1213TC-3-.0082-8K-*	0.648	1.812
.01	HV1213TC-3-.01-8K-*	0.716	1.812
.012	HV1213TC-3-.012-8K-*	0.765	1.812
.015	HV1213TC-3-.015-8K-*	0.846	1.812
.018	HV1213TC-3-.018-8K-*	0.919	1.812
.022	HV1213TC-3-.022-8K-*	0.806	2.187
.027	HV1213TC-3-.027-8K-*	0.885	2.187
.033	HV1213TC-3-.033-8K-*	0.970	2.187
.039	HV1213TC-3-.039-8K-*	1.048	2.187
.047	HV1213TC-3-.047-8K-*	1.143	2.187
.056	HV1213TC-3-.056-8K-*	1.241	2.187
.068	HV1213TC-3-.068-8K-*	1.360	2.187
.082	HV1213TC-3-.082-8K-*	1.487	2.187
.1	HV1213TC-3-.1-8K-*	1.635	2.187

Cap.	10000 VDC		
μF	Part #	D	L
.001	HV1213TC-3-.001-10K-*	0.324	2.187
.0012	HV1213TC-3-.0012-10K-*	0.342	2.187
.0015	HV1213TC-3-.0015-10K-*	0.367	2.187
.0018	HV1213TC-3-.0018-10K-*	0.390	2.187
.0022	HV1213TC-3-.0022-10K-*	0.419	2.187
.0027	HV1213TC-3-.0027-10K-*	0.452	2.187
.0033	HV1213TC-3-.0033-10K-*	0.488	2.187
.0039	HV1213TC-3-.0039-10K-*	0.521	2.187
.0047	HV1213TC-3-.0047-10K-*	0.563	2.187
.0056	HV1213TC-3-.0056-10K-*	0.605	2.187
.0068	HV1213TC-3-.0068-10K-*	0.658	2.187
.0082	HV1213TC-3-.0082-10K-*	0.714	2.187
.01	HV1213TC-3-.01-10K-*	0.779	2.187
.012	HV1213TC-3-.012-10K-*	0.846	2.187
.015	HV1213TC-3-.015-10K-*	0.936	2.187
.018	HV1213TC-3-.018-10K-*	1.018	2.187
.022	HV1213TC-3-.022-10K-*	0.862	2.750
.027	HV1213TC-3-.027-10K-*	0.946	2.750
.033	HV1213TC-3-.033-10K-*	1.038	2.750
.039	HV1213TC-3-.039-10K-*	1.122	2.750
.047	HV1213TC-3-.047-10K-*	1.225	2.750
.056	HV1213TC-3-.056-10K-*	1.331	2.750
.068	HV1213TC-3-.068-10K-*	1.460	2.750
.082	HV1213TC-3-.082-10K-*	1.596	2.750
.1	HV1213TC-3-.1-10K-*	1.756	2.750

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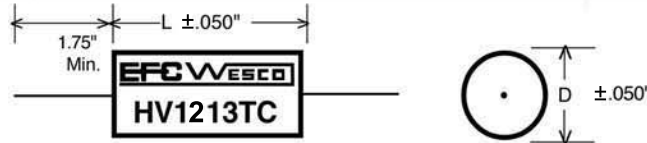


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## HV1213TC Tubular Wrap & Fill

## High Voltage Metallized Polypropylene Capacitors

Lead Spec.  
Tinned Copperweld  
Under .250D = 24 AWG  
.250 - .440D = 22AWG  
Above .440D = 20 AWG



# Dimensions and Ratings

Cap.	12500 VDC		
μF	Part #	D	L
.001	HV1213TC-3-.001-12.5K-*	0.310	2.750
.0012	HV1213TC-3-.0012-12.5K-*	0.326	2.750
.0015	HV1213TC-3-.0015-12.5K-*	0.348	2.750
.0018	HV1213TC-3-.0018-12.5K-*	0.369	2.750
.0022	HV1213TC-3-.0022-12.5K-*	0.395	2.750
.0027	HV1213TC-3-.0027-12.5K-*	0.425	2.750
.0033	HV1213TC-3-.0033-12.5K-*	0.458	2.750
.0039	HV1213TC-3-.0039-12.5K-*	0.489	2.750
.0047	HV1213TC-3-.0047-12.5K-*	0.526	2.750
.0056	HV1213TC-3-.0056-12.5K-*	0.566	2.750
.0068	HV1213TC-3-.0068-12.5K-*	0.614	2.750
.0082	HV1213TC-3-.0082-12.5K-*	0.665	2.750
.01	HV1213TC-3-.01-12.5K-*	0.725	2.750
.012	HV1213TC-3-.012-12.5K-*	0.786	2.750
.015	HV1213TC-3-.015-12.5K-*	0.869	2.750
.018	HV1213TC-3-.018-12.5K-*	0.945	2.750
.022	HV1213TC-3-.022-12.5K-*	1.036	2.750
.027	HV1213TC-3-.027-12.5K-*	1.140	2.750
.033	HV1213TC-3-.033-12.5K-*	1.253	2.750
.039	HV1213TC-3-.039-12.5K-*	1.356	2.750
.047	HV1213TC-3-.047-12.5K-*	1.482	2.750
.056	HV1213TC-3-.056-12.5K-*	1.612	2.750
.068	HV1213TC-3-.068-12.5K-*	1.769	2.750
.082	HV1213TC-3-.082-12.5K-*	1.937	2.750
.1	HV1213TC-3-.1-12.5K-*	2.132	2.750

Cap.	16000 VDC		
μF	Part #	D	L
.001	HV1213TC-3-.001-16K-*	0.368	2.750
.0012	HV1213TC-3-.0012-16K-*	0.391	2.750
.0015	HV1213TC-3-.0015-16K-*	0.423	2.750
.0018	HV1213TC-3-.0018-16K-*	0.453	2.750
.0022	HV1213TC-3-.0022-16K-*	0.489	2.750
.0027	HV1213TC-3-.0027-16K-*	0.531	2.750
.0033	HV1213TC-3-.0033-16K-*	0.577	2.750
.0039	HV1213TC-3-.0039-16K-*	0.619	2.750
.0047	HV1213TC-3-.0047-16K-*	0.670	2.750
.0056	HV1213TC-3-.0056-16K-*	0.724	2.750
.0068	HV1213TC-3-.0068-16K-*	0.789	2.750
.0082	HV1213TC-3-.0082-16K-*	0.858	2.750
.01	HV1213TC-3-.01-16K-*	0.939	2.750
.012	HV1213TC-3-.012-16K-*	1.022	2.750
.015	HV1213TC-3-.015-16K-*	1.134	2.750
.018	HV1213TC-3-.018-16K-*	1.235	2.750
.022	HV1213TC-3-.022-16K-*	1.358	2.750
.027	HV1213TC-3-.027-16K-*	1.497	2.750
.033	HV1213TC-3-.033-16K-*	1.648	2.750
.039	HV1213TC-3-.039-16K-*	1.786	2.750
.047	HV1213TC-3-.047-16K-*	1.955	2.750

\* - Please insert appropriate tolerance code