

# HST

## +125°C Axial Lead Aluminum Electrolytic Capacitors



For all general purpose and high temperature applications

### FEATURES

- 125°C Temperature rating
- Capacitance Range: 1.0  $\mu\text{F}$  to 4,700  $\mu\text{F}$
- Voltage Range: 10 WVDC to 63 WVDC
- Extended Life

### SPECIFICATIONS

Capacitance Tolerance		$\pm 20\%$ at 120Hz, 20°C					
Operating Temperature Range		-40°C to +125°C					
Dissipation Factor 120Hz, 20°C	WVDC	10	16	25	35	50	63
	$\tan \delta$	.2	.16	.14	.12	.1	.1
Note: For above D.F. specifications, add .02 for every 1,000 $\mu\text{f}$ above 1,000 $\mu\text{f}$							
Impedance Ratio (Max.) @120Hz	WVDC	10	16	25	35	50	63
	-25°C/20°C	3	2	2	2	2	2
	-40°C/20°C	4	4	4	4	4	4
Leakage Current	WVDC	$\leq 63$ WVDC			$\leq 63$ WVDC		
	Time	1 minute			2 minutes		
		.03 CV or 4 $\mu\text{A}$ whichever is greater			.01 CV or 4 $\mu\text{A}$ whichever is greater		
Load Life	2,000 hours (1,000 hours D=8mm) at +125°C with rated WVDC						
	Capacitance change Dissipation factor Leakage current	$\leq 20\%$ of initial measured value $\leq 200\%$ of initial specified value $\leq 100\%$ specified value					
Shelf Life	1,000 hours at +105°C with no voltage applied. Units will meet load life specifications						
Ripple Current Multipliers	Frequency (Hz)						
	Capacitance ( $\mu\text{F}$ )	50	120	300	1K	10K	
	$C \leq 47$	.75	1.0	1.35	1.57	2	
	$470 < C \leq 470$	.8	1.0	1.34	1.34	1.5	
	$C > 470$	.85	1.0	1.1	1.13	1.15	

### SPECIAL ORDER OPTIONS

(See pages 33 thru 37)

- Special tolerances:  $\pm 10\%$  (K), -10% + 30% (Q)
- Tape and Reel/Ammo-Pack
- Cut, Formed, Cut and Formed, and Snap In Leads



ILLINOIS CAPACITOR, INC.

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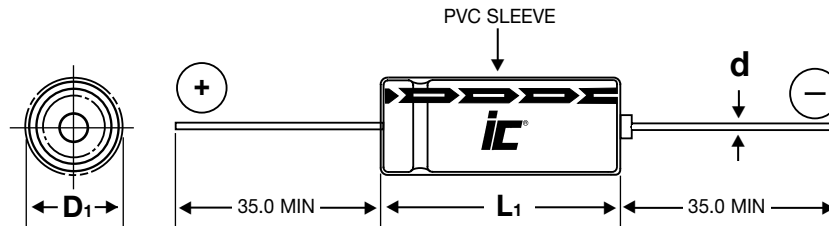
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## PHYSICAL DIMENSIONS

WVDC (SV) μF	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
1					8x16	
2.2					8x16	
3.3					8x16	
4.7					8x16	
10					8x16	
22					8x16	
33					8x16	
47					8x16	8x20
100			8x16		8x20	10x21
220	8x16		8x20	10x21	10x26	12.5x26
330		8x20	10x21	10x26	12.5x26	12.5x31
470	8x20	10x21	10x26	12.5x26	12.5x31	16x31
1000	10x26	12.5x26	12.5x31	16x31	16x41	
2200	12.5x31	16x31	16x41			
3300	16x31	16x41				
4700	16x41					

Convert to inches, divide by 25.4

DxL (mm)



### LEAD INFORMATION VS. CASE DIAMETER

D	8.0	10.0	12.5	16.0
d	0.6	0.6	0.8	0.8
B	0.5	0.5	0.5	0.5

$D_1 = D + B$  Max.  
 $L_1 = L + 2$  Max.

NOTE: Case Vent is standard on all diameter  $\geq 8.0$ mm

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## STANDARD PART LISTING

Capacitance (µF)	WVDC	IC <sup>®</sup> PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (mA) 120Hz, +125°C	Dimension D x L (mm)
1	50	105HST050M	165.786	10	8x16
2.2	50	225HST050M	75.357	22	8x16
3.3	50	335HST050M	50.238	27	8x16
4.7	50	475HST050M	35.274	32	8x16
10	50	106HST050M	16.579	47	8x16
22	50	226HST050M	7.536	70	8x16
33	50	336HST050M	5.024	85	8x16
47	50	476HST050M	3.527	105	8x16
47	63	476HST063M	3.527	120	8x20
100	25	107HST025M	2.321	125	8x16
100	50	107HST050M	1.658	180	8x20
100	63	107HST063M	1.658	200	10x21
220	10	227HST010M	1.507	155	8x16
220	25	227HST025M	1.055	220	8x20
220	35	227HST035M	0.904	260	10x21
220	50	227HST050M	0.754	320	10x26
220	63	227HST063M	0.754	360	12.5x26
330	16	337HST016M	0.804	250	8x20
330	25	337HST025M	0.703	300	10x21
330	35	337HST035M	0.603	350	10x26

Capacitance (µF)	WVDC	IC <sup>®</sup> PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (mA) 120Hz, +125°C	Dimension D x L (mm)
330	50	337HST050M	0.502	430	12.5x26
330	63	337HST063M	0.502	480	12.5x31
470	10	477HST010M	0.705	270	8x20
470	16	477HST016M	0.564	330	10x21
470	25	477HST025M	0.494	390	10x26
470	35	477HST035M	0.423	470	12.5x26
470	50	477HST050M	0.353	570	12.5x31
470	63	477HST063M	0.353	650	16x31
1000	10	108HST010M	0.332	470	10x26
1000	16	108HST016M	0.265	590	12.5x26
1000	25	108HST025M	0.232	700	12.5x31
1000	35	108HST035M	0.199	850	16x31
1000	50	108HST050M	0.166	1030	16x41
2200	10	228HST010M	0.181	820	12.5x31
2200	16	228HST016M	0.151	1030	16x31
2200	25	228HST025M	0.136	1210	16x41
3300	10	338HST010M	0.131	1090	16x31
3300	16	338HST016M	0.111	1330	16x41
4700	10	478HST010M	0.099	1390	16x41