

Snap-In Aluminum Electrolytic Capacitors



RoHS

MHD Series

MERITEK

FEATURES

- PCB Mounting
- More compact electronic equipment
- Lengths are all 20mm, Down size
- Load life of 2,000 hours at 85°C



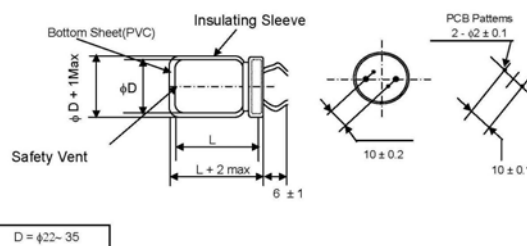
SPECIFICATIONS

Item	Characteristic											
Operating Temp Range	160V-250V: -40°C to +85°C 350V-400V: -25°C to +85°C											
Rated Working Voltage	160 to 400VDC											
Capacitance Tolerance	±20% (M)											
Leakage Current (20°C)	I≤0.02CV or 2mA, whichever is less (at 20°C after 5 minutes) I= Leakage current (μA) C= Nominal capacitance (μF) V= Rated voltage (VDC)											
Dissipation Factor Tanδ (120Hz, 20°C)	<table><tr><td rowspan="2">Tanδ (120Hz, 20°C)</td><td>160 to 250</td><td>350 to 400</td></tr><tr><td>0.10</td><td>0.20</td></tr></table>			Tanδ (120Hz, 20°C)	160 to 250	350 to 400	0.10	0.20				
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Low Temperature Characteristics	Impedance ratio at 120 Hz <table><tr><td>WV</td><td>160 to 250</td><td>350 to 450</td></tr><tr><td>Z -25°C/Z 20°C</td><td>4</td><td>8</td></tr><tr><td>Z -40°C/Z 20°C</td><td>12</td><td>-</td></tr></table>			WV	160 to 250	350 to 450	Z -25°C/Z 20°C	4	8	Z -40°C/Z 20°C	12	-
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Z -40°C/Z 20°C	12	-										
Load Life	After applying rated working voltage for 2000 hours at 85°C and then being stabilized at +20°C, capacitors shall meet following limits. <table><tr><td>Capacitance change</td><td>Within ±20% of the initial value</td></tr><tr><td>Dissipation</td><td>≤ ±200% of the initial specified value</td></tr><tr><td>Leakage current</td><td>≤ The initial specified value</td></tr></table>			Capacitance change	Within ±20% of the initial value	Dissipation	≤ ±200% of the initial specified value	Leakage current	≤ The initial specified value			
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Shelf Life	After storage for 1000 hours at 85 °C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits. <table><tr><td>Capacitance change</td><td>Within ±15% of the initial value</td></tr><tr><td>Dissipation</td><td>≤ 150% of the initial specified value</td></tr><tr><td>Leakage current</td><td>≤ The initial specified value</td></tr></table>			Capacitance change	Within ±15% of the initial value	Dissipation	≤ 150% of the initial specified value	Leakage current	≤ The initial specified value			
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PART NUMBERING SYSTEM

Meritek Series	MHD	160V	222	M	22X25
Voltage					
Capacitance					
CODE	222	562	153	473	
μF	2200	5600	15000	47000	
Tolerance - M= ±20%					
Case size (diameter X length, in mm)					

DIMENSIONS



RIPPLE CURRENT COEFFICIENT

Frequency

WV (V)	50	120	500	1K	10K	100K
160 to 250	0.82	1.0	1.20	1.37	1.45	1.50
350 to 400	0.82	1.0	1.18	1.23	1.35	1.40

Temperature

Temperature	≤ 45°C	60°C	70°C	85°C
Factor	1.45	1.30	1.15	1.00

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W.V(V) Cap (μF)	160(2C)				200(2D)				250(2E)			
	φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35
100									22x20			
									0.65			
150					22x20						30x20	
					0.75						0.87	
220	22x20					25x20					30x20	
	0.85					0.95					1.10	
270		25x20					30x20					35x20
		1.10					1.25					1.28
330			30x20				30x20					35x20
			1.20				1.40					1.45
390			30x20					35x20				
			1.35					1.60				
470				35x20				35x20				
				1.50				1.80				
560				35x20								
				1.65								

W.V(V) Cap (μF)	350(2V)				400(2G)			
	φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35
47					22x20			
					0.35			
56						25x20		
						0.40		
68						25x20		
						0.46		
82						25x20		
						0.60		
100		25x20					30x20	
		0.70					0.72	
120		25x20						35x20
		0.75						0.80
150			30x20					35x20
			0.80					0.86
180				35x20				35x20
				0.87				0.92

I_R : Maxium permissible ripple current [A(rms) at 105 °C,120Hz]

Case size [φ DxL (mm)]