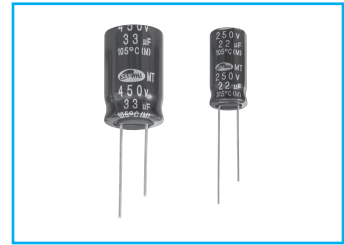


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

MT For Display, 12000 hours at 105°C Series

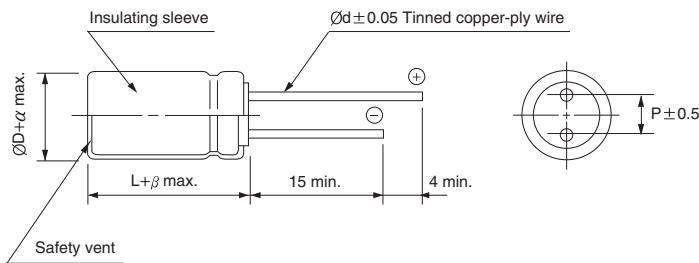


- High reliability withstanding 12000 Hours load life at 105°C
- For power supply and adapter
- Complied to the RoHS directive

Item	Characteristics																											
Operating temperature range	-40 ~ +105°C																											
Leakage current max.	I = 0.04CV+100µA (after 1 minutes) I = 0.02CV+25µA (after 5 minutes)																											
Capacitance tolerance	±20% at 120Hz, 20°C																											
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>WV</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>420</th> <th>450</th> <th>500</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td colspan="4">0.20</td> <td colspan="5">0.24</td> </tr> </tbody> </table>	WV	160	200	250	350	400	420	450	500	tanδ	0.20				0.24												
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Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>420</th> <th>450</th> <th>500</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>4</td> <td>4</td> <td>4</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> </tbody> </table>	WV	160	200	250	350	400	420	450	500	Z-25°C/Z+20°C	3	3	3	3	6	6	6	6	Z-40°C/Z+20°C	4	4	4	6	6	6	6	6
WV	160	200	250	350	400	420	450	500																				
Z-25°C/Z+20°C	3	3	3	3	6	6	6	6																				
Z-40°C/Z+20°C	4	4	4	6	6	6	6	6																				
Load life	<p>After an application of DC bias voltage plus the rated AC ripple current for 12000 hours at 105°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage.</p> <table border="1"> <tbody> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than 200% of specified value</td> </tr> </tbody> </table>	Leakage current	Less than specified value	Capacitance change	Within ±20% of initial value	tanδ	Less than 200% of specified value																					
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Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4																											

● DRAWING

Unit : mm



∅D	10	12.5	16	18	20
P	5.0	5.0	7.5	7.5	10.0
∅d	0.6	0.6	0.8	0.8	0.8
α	0.5				1.0
β	2.0				3.0

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

µF	Frequency	120Hz	1kHz	10kHz	50kHz	100kHz ≤
10 ~ 82		1.00	1.75	2.25	2.45	2.50
100 ~ 470		1.00	1.67	2.05	2.20	2.25

MT series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \diagdown WV	160		200		250		350	
10	10 × 16	102	10 × 16	110	10 × 12.5	110	10 × 16	135
22	10 × 16	195	10 × 16	200	10 × 16	195	12.5 × 20	270
27	10 × 16	222	10 × 16	222	10 × 20	240	12.5 × 20	285
33	10 × 16	245	10 × 20	280	12.5 × 20	294	12.5 × 25	290
39	10 × 16	265	10 × 20	305	12.5 × 20	322	12.5 × 25	320
47	10 × 20	335	10 × 20	335	12.5 × 20	400	16 × 25	410
			12.5 × 20	400				
68	12.5 × 20	400	12.5 × 20	447	12.5 × 25	540	16 × 25	550
			12.5 × 25	540				
82	12.5 × 20	450	12.5 × 25	560	16 × 20	600	18 × 25	625
			16 × 20	560				
100	12.5 × 25	525	16 × 25	652	16 × 25	652	18 × 31.5	743
	16 × 20	525			18 × 20	652		
120	12.5 × 25	580	16 × 25	714	16 × 25	714	18 × 35.5	840
	16 × 25	580						
150	16 × 25	750	16 × 25	760	18 × 25	820	18 × 35.5	942
180	16 × 25	810	16 × 31.5	850	18 × 31.5	920		
220	16 × 31.5	880	18 × 31.5	1000	18 × 31.5	1000		
	18 × 25	880						
270	16 × 35.5	1000	18 × 35.5	1150				
330	16 × 40	1142	18 × 40	1250				
	18 × 31.5	1119						
470	18 × 40	1401						

μF \diagdown WV	400		420		450		500	
10	10 × 16	135	10 × 20	135	10 × 20	135	12.5 × 20	165
22	12.5 × 20	270	12.5 × 20	225	12.5 × 25	296	16 × 20	260
27	12.5 × 25	285	12.5 × 20	254	12.5 × 25	305	16 × 25	329
33	12.5 × 25	320	16 × 20	345	16 × 20	364	16 × 25	350
39	12.5 × 30	320	16 × 25	345	16 × 25	400	16 × 31.5	413
47	16 × 25	420	16 × 25	450	16 × 25	450	16 × 35.5	462
	18 × 20	436	18 × 20	450	18 × 20	450	18 × 31.5	468
68	16 × 31.5	540	18 × 25	520	18 × 25	560	16 × 45	630
	18 × 25	540	18 × 31.5	580	18 × 31.5	590	18 × 35.5	600
82	18 × 31.5	700	18 × 31.5	650	16 × 40	650	16 × 50	685
					18 × 31.5	670	18 × 40	670
100	18 × 31.5	743	16 × 45	770	16 × 45	770	18 × 45	800
	18 × 35.5	820	18 × 35.5	770	18 × 35.5	790	20 × 41	800
120	18 × 35.5	840	16 × 50	850	16 × 50	850	18 × 50	920
	18 × 40	912	18 × 40	850	18 × 40	850		
150	18 × 40	1020	18 × 45	1000				
			20 × 41	1000				
180	20 × 41	1080						

↑ ↑
 Ripple current (mA rms) at 105°C, 120Hz
 Case size $\varnothing D \times L$ (mm)

MINIATURE TYPES