

# Aluminum Electrolytic Capacitors

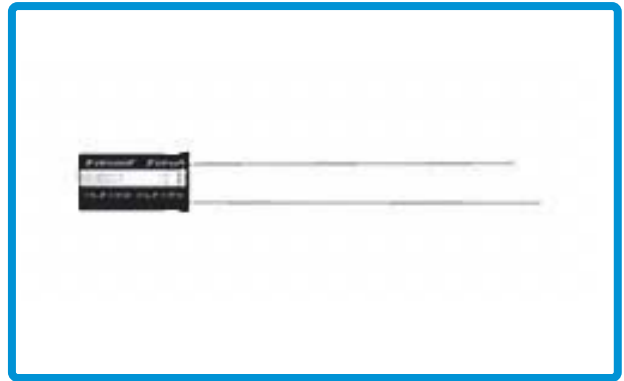
**RF Series**  
(High Ripple, Low ESR)

**MERITEK**



## FEATURES

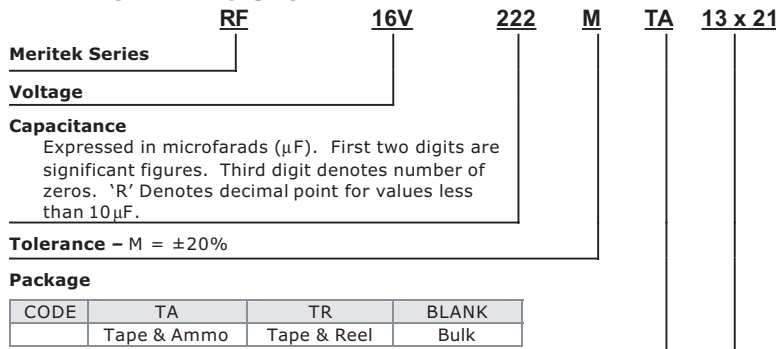
- Low ESR, low impedance
- Large permissible ripple current
- For AC adaptors and ballasts



## SPECIFICATIONS

Item	Characteristic														
Operating Temp Range	-25°C to +105°C														
Rated Working Voltage	160 to 450VDC														
Capacitance Tolerance	±20% (M)														
Leakage Current (25°C)	I ≤ 0.03CV+40μA (max) after 3 minutes I= Leakage current (μA) C=Nominal Capacitance(μF) V=Rated voltage														
Surge voltage (25°C)	<table border="1"> <tr> <td>WV</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>SV</td> <td>200</td> <td>250</td> <td>300</td> <td>400</td> <td>450</td> <td>500</td> </tr> </table>	WV	160	200	250	350	400	450	SV	200	250	300	400	450	500
WV	160	200	250	350	400	450									
SV	200	250	300	400	450	500									
Dissipation Factor Tan δ (120Hz, 25°C)	Add 0.02 per 100μF for more than 100μF <table border="1"> <tr> <td>WV</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>tan δ</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> <td>0.12</td> <td>0.12</td> <td>0.15</td> </tr> </table>	WV	160	200	250	350	400	450	tan δ	0.10	0.10	0.10	0.12	0.12	0.15
WV	160	200	250	350	400	450									
tan δ	0.10	0.10	0.10	0.12	0.12	0.15									
Low Temperature Stability	Impedance ratio at 120Hz <table border="1"> <tr> <td>Rated voltage</td> <td>160-250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>-25°C to +25°C</td> <td>3</td> <td>4</td> <td>6</td> <td>15</td> </tr> </table>	Rated voltage	160-250	350	400	450	-25°C to +25°C	3	4	6	15				
Rated voltage	160-250	350	400	450											
-25°C to +25°C	3	4	6	15											
Load Life	After 2000 hours (1000 hours for ØD ≤ 8mm) application of WV at 105°C the capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance change</td> <td>≤ ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤ 200% of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ initial specified value</td> </tr> </table>	Capacitance change	≤ ±20% of initial value	Dissipation Factor	≤ 200% of initial specified value	Leakage current	≤ initial specified value								
Capacitance change	≤ ±20% of initial value														
Dissipation Factor	≤ 200% of initial specified value														
Leakage current	≤ initial specified value														
Shelf Life	At 105°C no voltage applied after 500 hours the capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance change</td> <td>≤ 20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤ 200% of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ 200% of initial specified value</td> </tr> </table>	Capacitance change	≤ 20% of initial value	Dissipation Factor	≤ 200% of initial specified value	Leakage current	≤ 200% of initial specified value								
Capacitance change	≤ 20% of initial value														
Dissipation Factor	≤ 200% of initial specified value														
Leakage current	≤ 200% of initial specified value														

## PART NUMBERING SYSTEM



**Case size - (D) Diameter X (L) Length in mm (Optional)**  
A suffix may be added to denote tape and reel/tape and ammo lead spacing or customer specific features

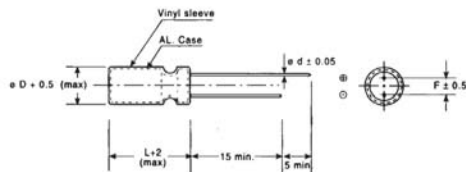
## CASE SIZE

D	6.3	8	10	13	16	18
F	2.5	3.5	5.0	7.5		
d	0.5		0.6		0.8	

## RIPPLE CURRENT COEFFICIENTS

Temperature	70	85	105
Multiplier	1.80	1.50	1.00

Frequency (Hz)	60	120	1K	10K
WV	Multiplier			
160-450	0.70	1.00	1.40	1.60



Case size: D x L (mm)  
Max ripple current: mA (rms)  
(R.C.): 85°C, 120Hz

## CASE SIZE & MAX RIPPLE CURRENT

μF	WV	160		200		250		350		400		450	
		ITEM	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
1													
2.2		6.3x11	22	6.3x11	22	8x11	25	10x13	17	10x13	17	10x13	15
3.3		8x11	31	8x11	31	10x13	33	10x16	27	10x16	27	10x21	27
4.7		8x11	37	10x13	40	10x13	40	10x21	45	10x21	45	13x21	40
10		10x13	60	10x16	65	10x21	70	13x21	65	13x26	70	16x25	65
22		10x21	110	10x21	110	13x26	120	16x25	110	16x25	110	16x32	110
33		13x21	130	13x26	140	13x26	140	16x32	150	16x32	150	18x35	140
47		13x26	170	13x26	170	16x25	180	18x35	180	18x35	180		
100		16x25	260	16x32	290	18x35	290						
220		18x35	440	18x42	470								