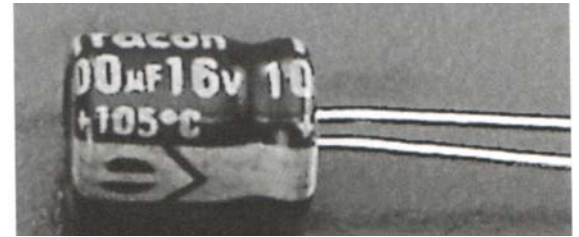


SMR series
Aluminum Electrolytic Capacitors
105°C/1000hrs Radial type small size L: 7mm & 9mm



◆ **Features**

- » Design for space-saving and high density insertion.
- » Applications : VTR, car radio, car stereos, charger, etc

◆ **Part Number**

SMR	476	M	350	R	B	-	0607
Series	Capacitance	Tolerance	Voltage	Lead form	package		Size
SMR	0.1uF=104	20%=M	4V=4V	Radial=R	Bulk=B		4x7=0407
	4.7uF=475		6.3V=6V3	Axial=A	Taping=T		5x7=0507
	47uF=476		10V=100				6x7=0607
			16V=160				8x7=0807
			35V=350				8x9=0809
			50V=500				

◆ Specification

Test Item	Performance Characteristics																								
Operating Temperature Range	-40 to +105°C																								
Rated voltage Range	4 to 50 VDC																								
Capacitance Range	0.1 to 470uF																								
Capacitance Tolerance	±20% (120Hz, +20°C)																								
Leakage Current (+20°C, max.)	$I \leq 0.01 CV$ or 3(uA) After 1minute whichever is greater measured with rate working voltage applied.																								
Dissipation Factor ($\tan\delta$)	<table border="1"> <tr> <td>Working Voltage (VDC)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>D.F.(%)max (+20°C, at 120Hz)</td> <td>35</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> </tr> </table>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	D.F.(%)max (+20°C, at 120Hz)	35	24	20	16	14	12	10								
Working Voltage (VDC)	4	6.3	10	16	25	35	50																		
D.F.(%)max (+20°C, at 120Hz)	35	24	20	16	14	12	10																		
Low Temperature Characteristics (120Hz)	<table border="1"> <tr> <td>Working Voltage (VDC)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table> Impedance ratio max.	Working Voltage (VDC)	4	6.3	10	16	25	35	50	Z-25°C/Z+20°C	7	4	3	2	2	2	2	Z-40°C/Z+20°C	15	8	6	4	4	4	4
Working Voltage (VDC)	4	6.3	10	16	25	35	50																		
Z-25°C/Z+20°C	7	4	3	2	2	2	2																		
Z-40°C/Z+20°C	15	8	6	4	4	4	4																		
Load Life	Test conditions Duration time : 1000Hrs Ambient temperature:+105°C Applied voltage: Rated DC working voltage After test requirements: $\leq \pm 25\%$ of the initial measured value Dissipation Factor: $\leq 200\%$ of the initial specified value Leakage current: \leq The initial specified value																								
Shelf Life	Test conditions Duration time :500Hrs Ambient temperature:+105°C Applied voltage: None After test requirements at +20°C: Some limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																								

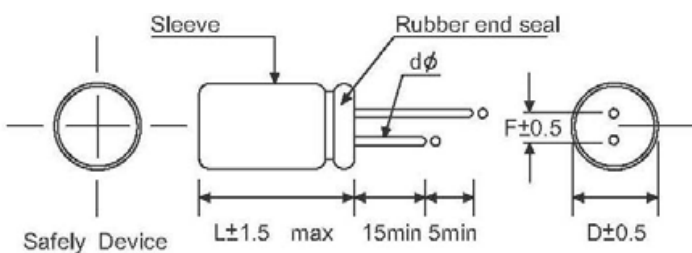
Multiplier for Ripple Current VS, Frequency

CAP (uF) \ HZ		50(60)	120	500	1K	10K
Multiplier	0.1~47	0.65	1.0	1.20	1.30	1.5
	56UP	0.8	1.0	1.10	1.15	1.20

Multiplier for Ripple Current VS, Temperature

Temperature (°C)	45	60	70	85	105
Multiplier	2.10	1.90	1.65	1.40	1.00

Diagram of Dimensions: (Unit: mm)



D Ø	4	5	6.3	8
F	1.5	2.0	2.5	3.5
d Ø	0.45	0.5		

◆ Standard Products Table

Ø D x L (mm)

WV uF	4		6.3		10		16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1~0.47	-	-	-	-	-	-	-	-	-	-	-	-	4x7	1.0~5.0
1	-	-	-	-	-	-	-	-	-	-	-	-	4x7 5x7	10 15
2.2	-	-	-	-	-	-	-	-	-	-	-	-	4x7	19
3.3	-	-	-	-	-	-	-	-	-	-	-	-	4x7	24
4.7	-	-	-	-	-	-	-	-	-	-	-	-	4x7	29
10	-	-	-	-	-	-	-	-	4x7	30	4x7 5x7	28 30	5x7	32
22	-	-	-	-	4x7	35	4x7	37	4x7 5x7	40 45	6x7	47	6x7	50
33	-	-	4x7	32	4x7 5x7	40 41	4x7 5x7	41 42	5x7	47	6x7	52	8x7	75
47	4x7	35	4x7 5x7	40 50	4x7	48	5x7	60	6x7	65	6x7	70	8x7	85
68	5x7	55	5x7	55	5x7	60	6x7	72	6x7	75	8x7	84	8x9	97
100	5x7	58	4x7 5x7 6x7	45 65 75	5x7	80	6x7	92	6x7 8x7	100 125	8x7	150	-	-
220	5x7	80	5x7 6x7	80 90	6x7	105	6x7 8x7	125 145	8x7 8x9	150 155	-	-	-	-
330	6x7	130	6x7	130	8x7	160	8x7	175	-	-	-	-	-	-
470	8x7	180	8x7	180	8x7	192	8x9	245	-	-	-	-	-	-

Ripple Current(mA,rms)at105°C 120Hz

