

# Panasonic

## Aluminum Electrolytic Capacitors/FC

### Radial Lead Type

Series: FC Type :A

Japan  
Malaysia  
China



- Features Endurance : 105°C 1000 h to 5000 h  
Low impedance

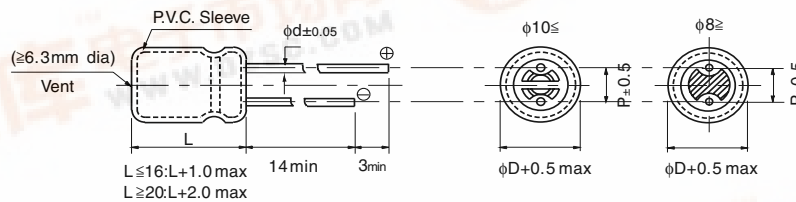
#### ■ Specifications

Category Temp. Range	-55 to +105°C	
Rated W.V. Range	6.3 to 63 V .DC	
Nominal Cap. Range	1.0 to 15000 μ F	
Capacitance Tolerance	±20 % (120Hz/+20°C)	
DC Leakage Current	$I \leq 0.01 CV$ or $3(\mu A)$ after 2 minues application of rated working voltage at +20°C(Whichever, is greater)	
Dissipation Factor	Please see the attached standard products list	
Endurance	After following life test with DC voltage and +105±2°C ripple current value applied (The sum of DC and ripple peak voltage shall not exceed the rated working voltage), the capacitors shall meet the limits specified below. Duration : 1000 hours (φ4 to 6.3), 2000hours (φ8), 3000 hours (φ10), 5000 hours (φ12.5 to 18) Post test requirement at +20 °C	
	Capacitance change	±20% of initial measured value
	D.F.	≤ 200 % of initial specified value
Shelf Life	DC leakage current	≤ initial specified value
	After storage for 1000 hours at +105±2 °C with no voltage applied and then being stabilized at +20 °C, capacitor shall meet the limits specified in "Endurance". (With voltage treatment)	

#### ■ Frequency correction factor for ripple current

W.V.(V.DC)	Capacitance (μF)	Frequency(Hz)				
		60	120	1k	10k	100k
6.3 to 63	1.0 to 330	0.55	0.65	0.85	0.90	1.0
	390 to 1000	0.70	0.75	0.90	0.95	1.0
	1200 to 2200	0.75	0.80	0.90	0.95	1.0
	2700 to 15000	0.80	0.85	0.95	1.00	1.0

#### ■ Dimensions in mm (not to scale)



	L=7			L ≥ 11							
	4	5	6.3	4	5	6.3	8	10	12.5	16	18
Body Dia. φD											
Body Length L									15 to 25	30 to 35	
Lead Dia. φd	0.45	0.45	0.45	0.45	0.5	0.5	0.6	0.6	0.6	0.8	0.8
Lead space P	1.5	2	2.5	1.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.  
Whenever a doubt about safety arises from this product, please contact us immediately for technical consultation.

Case size/ Impedance/ Ripple Current

W.V.(VDC) Case size (φD×L)	6.3V to 35V			50V			63V		
	Impedance Ω /100kHz		Ripple Current mA r.m.s. /100 kHz	Impedance Ω /100kHz		Ripple Current mA r.m.s. /100 kHz	Impedance Ω /100kHz		Ripple Current mA r.m.s. /100 kHz
	20°C	-10°C		20°C	-10°C		20°C	-10°C	
4 × 7	2.00	5.00	65	-	-	-	-	-	-
5 × 7	0.95	2.40	120	-	-	-	-	-	-
6.3 × 7	0.45	1.20	200	-	-	-	-	-	-
4 × 11	1.30	2.60	120	2.50	5.00	90	3.50	7.00	80
5 × 11	0.80	1.60	175	2.4 *1	4.8 *1	*3	2.00	4.00	145
				1.3 *2	2.6 *2	*3			
5 × 15	0.50	1.00	235	0.90	1.80	215	1.30	2.60	200
6.3 × 11.2	0.35	0.700	290	0.60	1.20	260	1.00	2.00	240
6.3 × 15	0.25	0.500	400	0.40	0.80	360	0.70	1.40	330
8 × 11.5	0.117	0.234	555	0.234	0.468	485	0.342	0.684	405
8 × 15	0.085	0.170	730	0.155	0.310	635	0.230	0.460	535
8 × 20	0.065	0.130	995	0.120	0.240	860	0.178	0.356	690
10 × 12.5	0.090	0.180	765	0.160	0.324	615	0.256	0.512	535
10 × 16	0.068	0.136	1050	0.119	0.238	850	0.194	0.368	600
10 × 20	0.052	0.104	1220	0.090	0.180	1030	0.147	0.294	885
10 × 25	0.045	0.090	1440	0.082	0.164	1200	0.130	0.260	1050
10 × 30	0.035	0.070	1815	0.060	0.120	1610	0.090	0.180	1300
12.5 × 15	0.065	0.130	1205	0.110	0.220	1150	0.150	0.300	1020
12.5 × 20	0.038	0.076	1655	0.063	0.126	1480	0.085	0.170	1285
12.5 × 25	0.030	0.060	1945	0.050	0.100	1832	0.070	0.140	1720
12.5 × 30	0.025	0.050	2310	0.040	0.080	2215	0.055	0.110	2090
12.5 × 35	0.022	0.044	2510	0.034	0.068	2285	0.047	0.094	2265
12.5 × 40	0.018	0.036	2655	0.030	0.060	2590	0.042	0.084	2560
16 × 15	0.043	0.086	1690	0.080	0.160	1610	0.090	0.180	1410
16 × 20	0.029	0.058	2205	0.048	0.096	1835	0.059	0.118	1765
16 × 25	0.022	0.044	2555	0.034	0.068	2235	0.050	0.100	2160
16 × 31.5	0.018	0.036	3010	0.028	0.056	2700	0.043	0.086	2670
16 × 35.5	0.016	0.032	3150	0.025	0.050	2790	0.036	0.072	2770
16 × 40	0.015	0.030	3360	0.023	0.046	2845	0.030	0.060	2825
18 × 15	0.038	0.076	2000	0.068	0.136	1900	0.086	0.172	1690
18 × 20	0.028	0.056	2490	0.042	0.084	2420	0.055	0.110	2290
18 × 25	0.020	0.040	2740	0.029	0.058	2610	0.043	0.086	2585
18 × 31.5	0.016	0.032	3635	0.025	0.050	3000	0.032	0.064	2950
18 × 35.5	0.015	0.030	3680	0.023	0.046	3100	0.030	0.060	3095
18 × 40	0.014	0.028	3735	-	-	-	0.025	0.050	3205

\*1; Apply to 1μF

\*2; Apply to 2.2, 3.3, 4.7, 10L, 12, 18, and 22μF

\*3

Case size φD×L (mm)	Capacitance (μF)	Impedance Ω/100kHz		Ripple Current mA r.m.s /100 kHz
		20°C	-10°C	
5 × 11	1.0	2.40	4.80	20
	2.2	1.30	2.60	45
	3.3	1.30	2.60	65
	4.7	1.30	2.60	95
	10L	1.30	2.60	125
	12	1.30	2.60	135
	15	1.30	2.60	145
	18	1.30	2.60	155
22	1.30	2.60	155	

■ Standard Products

W.V.	Cap. (±20%) (V)	Case size		Specification			Lead Length				Part No.	Min.Packaging Q'ty	
		Dia.	Length	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) (Ω)	Endurance (hours)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
								Straight (mm)	Taping *B (mm)	Taping *H (mm)			
6.3	27	4	7	65	2.0	1000	0.45	1.5	5.0	2.5	EEAFC0J270( )	200	2000
	56	5	7	120	0.950	1000	0.45	2.0	5.0	2.5	EEAFC0J560( )	200	2000
	68	4	11	120	1.30	1000	0.45	1.5	5.0	2.5	EEUFC0J680( )	200	2000
	100	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC0J101( )	200	2000
	120	6.3	7	200	0.450	1000	0.45	2.5	5.0	2.5	EEAFC0J121( )	200	2000
	150	5	15	235	0.50	1000	0.50	2.0	5.0	2.5	EEUFC0J151( )	200	2000
	220	6.3	11.2	290	0.350	1000	0.50	2.0	5.0	2.5	EEUFC0J221( )	200	2000
	270	6.3	11.2	290	0.350	1000	0.50	2.0	5.0	2.5	EEUFC0J271( )	200	2000
	330	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC0J331S( )	200	2000
		6.3	15	400	0.250	1000	0.50	2.5	5.0	2.5	EEUFC0J331( )	200	2000
	390	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC0J391( )	200	1000
	470	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC0J471( )	200	1000
	560	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC0J561( )	200	1000
	820	8	15	730	0.085	2000	0.60	3.5	5.0		EEUFC0J821L( )	200	1000
		10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC0J821	200	500
	1000	10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC0J102( )	200	500
	1200	8	20	995	0.065	2000	0.60	3.5	5.0		EEUFC0J122L( )	200	1000
		10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC0J122( )	200	500
	1500	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC0J152( )	200	500
		12.5	15	1205	0.065	5000	0.60	5.0	5.0		EEUFC0J152S( )	200	500
	1800	10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC0J182	200	500
	2200	10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC0J222( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC0J222S( )	100	250
	2700	10	30	1815	0.035	3000	0.60	5.0			EEUFC0J272L	100	
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC0J272( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC0J272S( )	100	250
	3300	12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC0J332( )	200	500
		18	15	2000	0.038	5000	0.80	7.5	7.5		EEUFC0J332S( )	100	250
	3900	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC0J392( )	200	500
	4700	12.5	30	2310	0.025	5000	0.80	5.0			EEUFC0J472	100	
16		20	2205	0.029	5000	0.80	7.5	7.5		EEUFC0J472S( )	100	250	
5600	12.5	35	2510	0.022	5000	0.80	5.0			EEUFC0J562L	100		
	16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC0J562( )	100	250	
6800	12.5	40	2655	0.018	5000	0.80	5.0			EEUFC0J682L	100		
	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC0J682( )	100	250	
	18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC0J682S( )	100	250	
8200	16	31.5	3010	0.018	5000	0.80	7.5			EEUFC0J822	100		
10000	16	35.5	3150	0.016	5000	0.80	7.5			EEUFC0J103	100		
	18	25	2740	0.020	5000	0.80	7.5	7.5		EEUFC0J103S( )	100	250	
12000	16	40	3360	0.015	5000	0.80	7.5			EEUFC0J123L	100		
	18	31.5	3635	0.016	5000	0.80	7.5			EEUFC0J123	50		
15000	18	35.5	3680	0.015	5000	0.80	7.5			EEUFC0J153	50		
10	22	4	7	65	2.0	1000	0.45	1.5	5.0	2.5	EEAFC1A220( )	200	2000

When requesting taped product, please put the letter "B" or "H" between the "( )". Lead wire pitch B=5mm, 7.5mm. H=2.5mm.

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■ Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification			Lead Length				Part No.	Min.Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) (Ω)	Endurance (hours)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
								Straight (mm)	Taping *B (mm)	Taping *H (mm)			
10	39	5	7	120	0.950	1000	0.45	2.0	5.0	2.5	EEAFC1A390( )	200	2000
	47	4	11	120	1.30	1000	0.45	1.5	5.0	2.5	EEUFC1A470( )	200	2000
	82	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1A820( )	200	2000
		6.3	7	200	0.450	1000	0.45	2.5	5.0	2.5	EEAFC1A820( )	200	2000
	100	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1A101S( )	200	2000
		5	15	235	0.50	1000	0.50	2.0	5.0	2.5	EEUFC1A101( )	200	2000
	150	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1A151( )	200	2000
	180	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1A181( )	200	2000
	220	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1A221S( )	200	2000
		6.3	15	400	0.250	1000	0.50	2.5	5.0	2.5	EEUFC1A221( )	200	2000
	330	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1A331( )	200	1000
	390	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1A391( )	200	1000
	470	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1A471( )	200	1000
	560	10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1A561	200	500
	680	8	15	730	0.085	2000	0.60	3.5	5.0		EEUFC1A681L( )	200	1000
		10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1A681( )	200	500
	820	10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1A821( )	200	500
	1000	8	20	995	0.065	2000	0.60	3.5	5.0		EEUFC1A102L( )	200	1000
		10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1A102( )	200	500
	1200	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1A122( )	200	500
		12.5	15	1205	0.065	5000	0.60	5.0	5.0		EEUFC1A122S( )	200	500
	1500	10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC1A152( )	200	500
	1800	12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1A182( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC1A182S( )	100	250
	2200	10	30	1815	0.035	3000	0.60	5.0			EEUFC1A222L	100	
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1A222( )	200	500
	2700	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1A272( )	200	500
		18	15	2000	0.038	5000	0.80	7.5	7.5		EEUFC1A272S( )	100	250
	3300	12.5	30	2310	0.025	5000	0.80	5.0			EEUFC1A332	100	
		16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1A332S( )	100	250
3900	12.5	35	2510	0.022	5000	0.80	5.0			EEUFC1A392L	100		
	16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1A392( )	100	250	
4700	12.5	40	2655	0.018	5000	0.80	5.0			EEUFC1A472L	100		
	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC1A472( )	100	250	
5600	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC1A562( )	100	250	
	18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC1A562S( )	100	250	
6800	16	31.5	3010	0.018	5000	0.80	7.5			EEUFC1A682	100		
	18	25	2740	0.020	5000	0.80	7.5	7.5		EEUFC1A682S( )	100	250	
8200	16	35.5	3150	0.016	5000	0.80	7.5			EEUFC1A822L	100		
	18	31.5	3635	0.016	5000	0.80	7.5			EEUFC1A822	50		
10000	18	35.5	3680	0.015	5000	0.80	7.5			EEUFC1A103	50		
12000	18	40	3735	0.014	5000	0.80	7.5			EEUFC1A123	50		

When requesting taped product, please put the letter "B" or "H" between the "( )". Lead wire pitch B=5mm, 7.5mm. H=2.5mm.

■ Standard Products

W.V. (V)	Cap. ( $\mu$ F) ( $\pm 20\%$ )	Case size		Specification			Lead Length				Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) ( $\Omega$ )	Endurance (hours)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
								Straight (mm)	Taping *B (mm)	Taping *H (mm)			
16	15	4	7	65	2.0	1000	0.45	1.5	5.0	2.5	EEAFC1C150( )	200	2000
	27	5	7	120	0.950	1000	0.45	2.0	5.0	2.5	EEAFC1C270( )	200	2000
	39	4	11	120	1.30	1000	0.45	1.5	5.0	2.5	EEUFC1C390( )	200	2000
	47	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1C470( )	200	2000
	56	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1C560( )	200	2000
		6.3	7	200	0.450	1000	0.45	2.5	5.0	2.5	EEAFC1C560( )	200	2000
	68	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1C680( )	200	2000
	82	5	15	235	0.50	1000	0.50	2.0	5.0	2.5	EEUFC1C820( )	200	2000
	100	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1C101( )	200	2000
	120	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1C121( )	200	2000
	180	6.3	15	400	0.250	1000	0.50	2.5	5.0	2.5	EEUFC1C181( )	200	2000
	220	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1C221( )	200	1000
	270	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1C271( )	200	1000
	330	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1C331( )	200	1000
	390	10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1C391( )	200	500
	470	8	15	730	0.085	2000	0.60	3.5	5.0		EEUFC1C471L( )	200	1000
		10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1C471( )	200	500
	560	10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1C561( )	200	500
	680	8	20	995	0.065	2000	0.60	3.5	5.0		EEUFC1C681L( )	200	1000
		10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1C681( )	200	500
	820	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1C821( )	200	500
		12.5	15	1205	0.065	5000	0.60	5.0	5.0		EEUFC1C821S( )	200	500
	1000	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1C102S( )	200	500
		10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC1C102( )	200	500
	1200	10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC1C122( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC1C122S( )	100	250
	1500	10	30	1815	0.035	3000	0.60	5.0			EEUFC1C152L	100	
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1C152( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC1C152S( )	100	250
	1800	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1C182( )	200	500
		18	15	2000	0.038	5000	0.80	7.5	7.5		EEUFC1C182S( )	100	250
	2200	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1C222( )	200	500
		16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1C222S( )	100	250
	2700	12.5	30	2310	0.025	5000	0.80	5.0			EEUFC1C272L	100	
		16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1C272( )	100	250
	3300	12.5	35	2510	0.022	5000	0.80	5.0			EEUFC1C332	100	
		18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC1C332S( )	100	250
	3900	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC1C392( )	100	250
		18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC1C392S	100	250
	4700	16	31.5	3010	0.018	5000	0.80	7.5			EEUFC1C472	100	
18		25	2740	0.020	5000	0.80	7.5	7.5		EEUFC1C472S( )	100	250	
5600	16	35.5	3150	0.016	5000	0.80	7.5			EEUFC1C562L	100		
	18	31.5	3635	0.016	5000	0.80	7.5			EEUFC1C562	50		

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■ Standard Products

W.V.	Cap. (±20%)  (V)	Case size		Specification			Lead Length				Part No.	Min.Packaging Qty	
		Dia.	Length	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) (Ω)	Endurance (hours)	Lead Dia.	Lead Space				Straight Leads	Taping
								Straight	Taping *B	Taping *H			
(V)	(μF)	(mm)	(mm)	(mA)	(Ω)	(hours)	(mm)	(mm)	(mm)	(mm)			
16	6800	16	40	3360	0.015	5000	0.80	7.5			EEUFC1C682	100	
	8200	18	35.5	3680	0.015	5000	0.80	7.5			EEUFC1C822	50	
25	10	4	7	65	2.0	1000	0.45	1.5	5.0	2.5	EEAFC1E100( )	200	2000
	22	5	7	120	0.950	1000	0.45	2.0	5.0	2.5	EEAFC1E220( )	200	2000
	27	4	11	120	1.30	1000	0.45	1.5	5.0	2.5	EEUFC1E270( )	200	2000
	39	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1E390( )	200	2000
		6.3	7	200	0.450	1000	0.45	2.5	5.0	2.5	EEAFC1E390( )	200	2000
	47	5	11	175	0.80	1000	0.50	2.0	5.0	2.5	EEUFC1E470( )	200	2000
	56	5	15	235	0.50	1000	0.50	2.0	5.0	2.5	EEUFC1E560( )	200	2000
	82	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1C820( )	200	2000
	100	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1E101S( )	200	2000
	120	6.3	15	400	0.250	1000	0.50	2.5	5.0	2.5	EEUFC1E121( )	200	2000
	180	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1E181( )	200	1000
	220	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1E221( )	200	1000
	270	10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1E271( )	200	500
	330	8	15	730	0.085	2000	0.60	3.5	5.0		EEUFC1E331L( )	200	1000
		10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1E331( )	200	500
	390	10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1E391( )	200	500
	470	8	20	995	0.065	2000	0.60	3.5	5.0		EEUFC1E471L( )	200	1000
		10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1E471( )	200	500
	560	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1E561( )	200	500
		12.5	15	1205	0.065	5000	0.60	5.0	5.0		EEUFC1E561S( )	200	500
	680	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1E681( )	200	500
	820	10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC1E821( )	200	500
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1E821S( )	200	500
	1000	10	30	1815	0.035	3000	0.60	5.0			EEUFC1E102L	100	
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1E102( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC1E102S( )	100	250
	1200	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1E122( )	200	500
18		15	2000	0.038	5000	0.80	7.5	7.5		EEUFC1E122S( )	100	250	
1500	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1E152( )	200	500	
	16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1E152S( )	100	250	
1800	12.5	30	2310	0.025	5000	0.80	5.0			EEUFC1E182L	100		
	16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1E182( )	100	250	
2200	12.5	35	2510	0.022	5000	0.80	5.0			EEUFC1E222	100		
	18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC1E222S( )	100	250	
2700	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC1E272( )	100	250	
3300	16	31.5	3010	0.018	5000	0.80	7.5			EEUFC1E332	100		
	18	25	2740	0.020	5000	0.80	7.5	7.5		EEUFC1E332S( )	100	250	
3900	16	35.5	3150	0.016	5000	0.80	7.5			EEUFC1E392L	100		
	18	31.5	3635	0.016	5000	0.80	7.5			EEUFC1E392	50		
4700	18	35.5	3680	0.015	5000	0.80	7.5			EEUFC1E472	50		
5600	18	40	3735	0.014	5000	0.80	7.5			EEUFC1E562	50		

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■ Standard Products

W.V. (V)	Cap. ( $\mu$ F) ( $\pm 20\%$ )	Case size		Specification			Lead Length				Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) ( $\Omega$ )	Endurance (hours)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
								Straight (mm)	Taping *B (mm)	Taping *H (mm)			
35	68	4	7	65	2.000	1000	0.45	1.5	5.0	2.5	EEAFC1V6R8( )	200	2000
	12	5	7	120	0.950	1000	0.45	2.0	5.0	2.5	EEAFC1V120( )	200	2000
	18	4	11	120	1.300	1000	0.45	1.5	5.0	2.5	EEUFC1V180( )	200	2000
	22	5	11	175	0.800	1000	0.50	2.0	5.0	2.5	EEUFC1V220( )	200	2000
	27	5	11	175	0.800	1000	0.50	2.0	5.0	2.5	EEUFC1V270( )	200	2000
		6.3	7	200	0.450	1000	0.45	2.5	5.0	2.5	EEAFC1V270( )	200	2000
	33	5	11	175	0.080	1000	0.50	2.0	5.0	2.5	EEUFC1V330( )	200	2000
	39	5	15	235	0.500	1000	0.50	2.0	5.0	2.5	EEUFC1V390( )	200	2000
	47	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1V470( )	200	2000
	56	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1V560( )	200	2000
	68	6.3	11.2	290	0.350	1000	0.50	2.5	5.0	2.5	EEUFC1V680( )	200	2000
	82	6.3	15	400	0.250	1000	0.50	2.5	5.0	2.5	EEUFC1V820( )	200	2000
	100	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1V101( )	200	1000
	120	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1V121( )	200	1000
	150	8	11.5	555	0.117	2000	0.60	3.5	5.0		EEUFC1V151( )	200	1000
	180	10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1V181( )	200	500
	220	8	15	730	0.085	2000	0.60	3.5	5.0		EEUFC1V221L( )	200	1000
		10	12.5	755	0.090	3000	0.60	5.0	5.0		EEUFC1V221( )	200	500
	270	10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1V271( )	200	500
	330	8	20	995	0.065	2000	0.60	3.5	5.0		EEUFC1V331L( )	200	1000
		10	16	1050	0.068	3000	0.60	5.0	5.0		EEUFC1V331( )	200	500
	390	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1V391( )	200	500
		12.5	15	1205	0.065	5000	0.60	5.0	5.0		EEUFC1V391S( )	200	500
	470	10	20	1220	0.052	3000	0.60	5.0	5.0		EEUFC1V471( )	200	500
	560	10	25	1440	0.045	3000	0.60	5.0	5.0		EEUFC1V561( )	200	500
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1V561S( )	200	500
	680	10	30	1815	0.035	3000	0.60	5.0			EEUFC1V681L	100	
		12.5	20	1655	0.038	5000	0.60	5.0	5.0		EEUFC1V681( )	200	500
		16	15	1690	0.043	5000	0.80	7.5	7.5		EEUFC1V681S( )	100	250
	820	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1V821L( )	200	500
		18	15	2000	0.038	5000	0.80	7.5	7.5		EEUFC1V821( )	100	250
	1000	12.5	25	1945	0.030	5000	0.60	5.0	5.0		EEUFC1V102( )	200	500
		16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1V102S( )	100	250
	1200	12.5	30	2310	0.025	5000	0.80	5.0			EEUFC1V122L	100	
		16	20	2205	0.029	5000	0.80	7.5	7.5		EEUFC1V122( )	100	250
1500	12.5	35	2510	0.022	5000	0.80	5.0			EEUFC1V152L	100		
	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC1V152( )	100	250	
	18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC1V152S( )	100	250	
1800	12.5	40	2655	0.018	5000	0.80	5.0			EEUFC1V182L	100		
	16	25	2555	0.022	5000	0.80	7.5	7.5		EEUFC1V182( )	100	250	
	18	20	2490	0.028	5000	0.80	7.5	7.5		EEUFC1V182S( )	100	250	
2200	16	31.5	3010	0.018	5000	0.80	7.5			EEUFC1V222	100		
	18	25	2740	0.020	5000	0.80	7.5	7.5		EEUFC1V222S( )	100	250	

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# Panasonic

## Aluminum Electrolytic Capacitors/FC

### Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification			Lead Length				Part No.	Min.Packaging Q'ty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) (Ω)	Endurance (hours)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
								Straight (mm)	Taping *B (mm)	Taping *H (mm)			
35	2700	16	35.5	3150	0.016	5000	0.80	7.5			EEUFC1V272L	100	
		18	31.5	3635	0.016	5000	0.80	7.5			EEUFC1V272	50	
	3300	18	35.5	3680	0.015	5000	0.80	7.5			EEUFC1V332	50	
		18	40	3735	0.014	5000	0.80	7.5			EEUFC1V392	50	
50	1.0	5	11	20	2.40	1000	0.50	2.0	5.0	2.5	EEUFC1H1R0( )	200	2000
	2.2	5	11	45	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H2R2( )	200	2000
	3.3	5	11	65	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H3R3( )	200	2000
	4.7	5	11	95	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H4R7( )	200	2000
	10	4	11	90	2.50	1000	0.45	1.5	5.0	2.5	EEUFC1H100( )	200	2000
		5	11	125	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H100L( )	200	2000
	12	5	11	135	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H120( )	200	2000
	15	5	11	145	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H150( )	200	2000
	18	5	11	155	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H180( )	200	2000
	22	5	11	155	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1H220( )	200	2000
	27	5	15	215	0.90	1000	0.50	2.0	5.0	2.5	EEUFC1H270( )	200	2000
	33	6.3	11.2	260	0.60	1000	0.50	2.5	5.0	2.5	EEUFC1H330( )	200	2000
	39	6.3	11.2	260	0.60	1000	0.50	2.5	5.0	2.5	EEUFC1H390( )	200	2000
	47	6.3	11.2	260	0.60	1000	0.50	2.5	5.0	2.5	EEUFC1H470( )	200	2000
	56	6.3	15	360	0.40	1000	0.50	2.5	5.0	2.5	EEUFC1H560( )	200	2000
	68	8	11.5	485	0.234	2000	0.60	3.5	5.0		EEUFC1H680( )	200	1000
	82	8	11.5	485	0.234	2000	0.60	3.5	5.0		EEUFC1H820( )	200	1000
	100	10	12.5	615	0.162	3000	0.60	5.0	5.0		EEUFC1H101( )	200	500
	120	8	15	635	0.155	2000	0.60	3.5	5.0		EEUFC1H121L( )	200	1000
		10	12.5	615	0.162	3000	0.60	5.0	5.0		EEUFC1H121( )	200	500
	150	10	16	850	0.119	3000	0.6	5.0	5.0		EEUFC1H151( )	200	500
	180	8	20	860	0.120	2000	0.60	3.5	5.0		EEUFC1H181L( )	200	1000
		10	16	850	0.119	3000	0.60	5.0	5.0		EEUFC1H181( )	200	500
	220	10	20	1030	0.090	3000	0.60	5.0	5.0		EEUFC1H221( )	200	500
		12.5	15	1150	0.110	5000	0.60	5.0	5.0		EEUFC1H221S( )	200	500
	270	10	25	1200	0.082	3000	0.60	5.0	5.0		EEUFC1H271( )	200	500
	330	10	30	1610	0.060	3000	0.60	5.0			EEUFC1H331L	100	
		12.5	20	1480	0.063	5000	0.60	5.0	5.0		EEUFC1H331( )	200	500
	390	12.5	20	1480	0.063	5000	0.60	5.0	5.0		EEUFC1H391( )	200	500
		16	15	1610	0.080	5000	0.80	7.5	7.5		EEUFC1H391S( )	100	250
	470	10	30	1610	0.060	3000	0.60	5.0			EEUFC1H471L	100	
		12.5	25	1832	0.050	5000	0.60	5.0	5.0		EEUFC1H471( )	200	500
560	12.5	25	1832	0.050	5000	0.60	5.0	5.0		EEUFC1H561( )	200	500	
	18	15	1900	0.068	5000	0.80	7.5	7.5		EEUFC1H561S( )	100	250	
680	12.5	30	2215	0.040	5000	0.80	5.0			EEUFC1H681L	100		
	16	20	1835	0.048	5000	0.80	7.5	7.5		EEUFC1H681( )	100	250	
820	12.5	35	2285	0.034	5000	0.80	5.0			EEUFC1H821L	100		
	18	20	2420	0.042	5000	0.80	7.5	7.5		EEUFC1H821( )	100	250	
1000	12.5	40	2590	0.030	5000	0.80	5.0			EEUFC1H102L	100		
	16	25	2235	0.034	5000	0.80	7.5	7.5		EEUFC1H102( )	100	250	

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**Panasonic**

Aluminum Electrolytic Capacitors/FC

■ Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification			Lead Length				Part No.	Min. Packaging Qty		
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+105°C) (mA)	Impedance (100kHz) (+20°C) (Ω)	Endurance (hours)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)	
								Straight (mm)	Taping *B (mm)	Taping *H (mm)				
50	1200	16	31.5	2700	0.028	5000	0.80	7.5			EEUFC1H122	100		
		18	25	2610	0.029	5000	0.80	7.5	7.5		EEUFC1H122S( )	100	250	
	1500	16	35.5	2790	0.025	5000	0.80	7.5			EEUFC1H152L	100		
		1800	16	40	2845	0.023	5000	0.80	7.5			EEUFC1H182L	100	
			18	31.5	3000	0.025	5000	0.80	7.5			EEUFC1H182	50	
	2200	18	35.5	3100	0.023	5000	0.80	7.5			EEUFC1H222	50		
63	6.8	4	11	80	3.50	1000	0.45	1.5	5.0	2.5	EEUFC1J6R8( )	200	2000	
	12	5	11	145	2.0	1000	0.50	2.0	5.0	2.5	EEUFC1J120( )	200	2000	
	18	5	15	200	1.30	1000	0.50	2.0	5.0	2.5	EEUFC1J180( )	200	2000	
	22	6.3	11.2	240	1.0	1000	0.50	2.5	5.0	2.5	EEUFC1J220( )	200	2000	
	33	6.3	11.2	240	1.0	1000	0.50	2.5	5.0	2.5	EEUFC1J330( )	200	2000	
	39	6.3	15	330	0.70	1000	0.50	2.5	5.0	2.5	EEUFC1J390( )	200	2000	
	47	8	11.5	405	0.342	2000	0.60	3.5	5.0		EEUFC1J470( )	200	1000	
	56	8	11.5	405	0.342	2000	0.60	3.5	5.0		EEUFC1J560( )	200	1000	
	68	8	11.5	405	0.342	2000	0.60	3.5	5.0		EEUFC1J680( )	200	1000	
	82	10	12.5	535	0.256	3000	0.60	5.0	5.0		EEUFC1J820( )	200	500	
	100	8	15	535	0.230	2000	0.60	3.5	5.0		EEUFC1J101L( )	200	1000	
		10	12.5	535	0.256	3000	0.60	5.0	5.0		EEUFC1J101( )	200	500	
	120	10	16	600	0.194	3000	0.60	5.0	5.0		EEUFC1J121( )	200	500	
	150	8	20	690	0.178	2000	0.60	3.5	5.0		EEUFC1J151( )	200	1000	
	180	10	20	885	0.147	3000	0.60	5.0	5.0		EEUFC1J181( )	200	500	
		12.5	15	1020	0.150	5000	0.60	5.0	5.0		EEUFC1J181S( )	200	500	
	220	10	20	885	0.147	3000	0.60	5.0	5.0		EEUFC1J221X( )	200	500	
		10	25	1050	0.130	3000	0.60	5.0	5.0		EEUFC1J221( )	200	500	
		12.5	20	1285	0.085	5000	0.60	5.0	5.0		EEUFC1J221S( )	200	500	
	270	16	15	1410	0.090	5000	0.80	7.5	7.5		EEUFC1J271( )	100	250	
	330	10	30	1300	0.090	3000	0.60	5.0			EEUFC1J331L	100		
		12.5	20	1285	0.085	5000	0.60	5.0	5.0		EEUFC1J331( )	200	500	
	390	12.5	25	1720	0.070	5000	0.60	5.0	5.0		EEUFC1J391( )	200	500	
		18	15	1690	0.086	5000	0.80	7.5	7.5		EEUFC1J391S( )	100	250	
	470	12.5	30	2090	0.055	5000	0.80	5.0			EEUFC1J471L	100		
		16	20	1765	0.059	5000	0.80	7.5	7.5		EEUFC1J471( )	100	250	
	560	16	25	2160	0.050	5000	0.80	7.5	7.5		EEUFC1J561( )	100	250	
	680	12.5	35	2265	0.047	5000	0.80	5.0			EEUFC1J681L	100		
		16	25	2160	0.050	5000	0.80	7.5	7.5		EEUFC1J681( )	100	250	
		18	20	2290	0.055	5000	0.80	7.5	7.5		EEUFC1J681S( )	100	250	
	820	12.5	40	2560	0.042	5000	0.80	5.0			EEUFC1J821L	100		
		16	31.5	2670	0.043	5000	0.80	7.5			EEUFC1J821	100		
18		25	2585	0.043	5000	0.80	7.5	7.5		EEUFC1J821S( )	100	250		
1000	16	31.5	2670	0.043	5000	0.80	7.5			EEUFC1J102U	100			
	16	35.5	2770	0.036	5000	0.80	7.5			EEUFC1J102	100			
1200	16	40	2825	0.030	5000	0.80	7.5			EEUFC1J122L	100			
	18	31.5	2950	0.032	5000	0.80	7.5			EEUFC1J122	50			
1500	18	35.5	3095	0.030	5000	0.80	7.5			EEUFC1J152	50			
1800	18	40	3205	0.025	5000	0.80	7.5			EEUFC1J182	50			

When requesting taped product, please put the letter "B" or "H" between the "( )". Lead wire pitch B=5mm, 7.5mm. H=2.5mm.

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.  
Whenever a doubt about safety arises from this product, please contact us immediately for technical consultation.