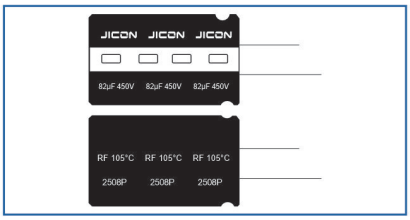
RF 系 列 SERIES



- 5000-8000h at 105°C
- Long life,for input filtering
- Switching power supplies
- Smoothing,Buffering,Filtering
- RoHS Compliant

Items	Characteristics
Operating Temperature Range(℃)	-25～+105
Voltage Range (V)	160～500
Capacitance Range (μF)	1～470
Capacitance Tolerance(20℃,120Hz)	±20%
Leakage Current (μA)	160～500V I≤ 0.02CV+15μA After 2 minute at 20℃ application of rated voltage I:Max. leakage current (μA) C:Nominal Capacitance (μF) V:Rated Voltage (V)

Dissipation Factor (20℃,120Hz)

Rated Voltage (V)	160	200	250	350	400	420	450	500
Tanδ(max)	0.15			0.20				0.24

Low Temperature Characteristics (Max. Impedance Ratio at 120Hz)

Rated Voltage (V)	160	200	250	350	400	420	450	500
Z-25℃/Z+20℃	4			6				8

Load Life

The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105℃.

Capacitance change	≤± 20% of the initial value
D.F.(Tanδ)	≤200% of specified value
Leakage current	≤The initial specified value

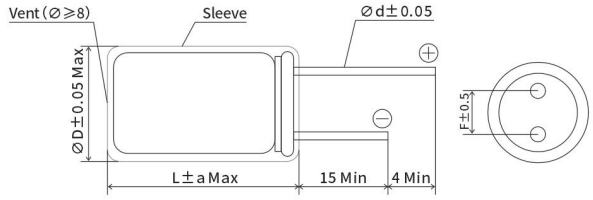
Case Dia	Life time (h)
φD=6.3	5000
φD=8	6000
φD>8	8000

Shelf Life

The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃without voltage applied .

Capacitance change	≤± 20% of the initial value
D.F.(Tanδ)	≤200% of specified value
Leakage current	≤200% of specified value

◆ Dimensions(mm)



ΦD	5	6.3	8	10	13	16	18	20	22
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	7.5	10
Φd	0.5			0.6		0.8			
a	1.5					2.0			

◆ Frequency Coefficient

Frequency / Cap(μF)	50/60HZ	120HZ	1KHZ	10KHZ	100KHZ
1.0～10	0.8	1.0	1.75	2.0	2.5
12～47	0.8	1.0	1.6	1.8	2.0
56～470	0.8	1.0	1.3	1.4	1.6

◆ Temperature Coefficient

Temperature(℃)	+70	+85	+105
Coefficient	1.80	1.40	1.00

◆ Ratings for RF Series

UR (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C 120Hz	Rated Ripple Current 105°C120Hz	Size ΦD×L
(V)	(μF)	(Ω)	(mA rms)	(mm)
160(200)2C	6.8	29.30	85	6.3×12
	10	19.90	128	8×12
	15	13.30	168	8×14
	18	11.00	185	8×16
	22	9.00	205	10×13
	33	6.00	255	10×16
	47	4.20	305	10×20
	56	3.20	350	13×16
	68	2.90	476	13×20
	82	2.40	520	13×20
	100	2.00	632	13×25
	150	1.30	785	16×25
	220	0.90	1050	18×25
	270	0.73	1250	18×30
	330	0.60	1410	18×35
	390	0.51	1650	18×40
	470	0.42	1920	22×35
200(250)2D	4.7	42.30	72	6.3×12
	8.2	24.20	108	8×12
	10	19.90	128	8×14
	15	13.20	148	8×16
	18	11.00	170	10×13
	22	9.00	205	10×16
	33	6.00	265	10×20
	47	4.20	398	10×25
	56	3.50	438	13×20
	82	2.40	560	13×25
	100	2.00	642	16×20
	150	1.30	856	16×25
	180	3.50	968	16×30
	220	0.90	1070	16×35
	270	0.73	1270	18×35
	330	0.60	1458	18×40
	470	0.42	1710	22×40
250(300)2E	3.3	60.30	65	6.3×12
	6.8	29.20	102	8×12
	8.2	24.20	118	8×14
	10	19.90	145	10×13
	15	13.20	165	10×16
	22	9.00	210	10×20
	27	7.30	255	10×25
	33	6.00	325	13×16
	47	4.20	398	13×20
	56	3.50	460	13×25
	68	2.90	530	16×20
	100	2.00	692	16×25
	150	1.30	868	18×25
	180	1.10	990	18×30
	220	0.90	1180	18×35
	270	0.73	1355	18×40
	330	0.60	1580	22×35
350(400)2V	2.2	120.60	55	6.3×12
	4.7	56.40	82	8×12
	6.8	39.00	115	10×13
	10	26.50	145	10×16
	15	17.60	210	10×20
	22	12.00	265	13×16
	27	9.80	332	13×20
	33	8.00	368	13×20
	47	5.60	440	16×20
	56	4.70	478	16×25
	68	3.90	575	16×30
	82	3.20	625	18×25
	100	2.60	710	18×30
	120	2.20	825	18×35
	150	1.70	975	18×40
	180	1.40	1210	22×35
	220	1.20	1350	22×40
400(450)2G	2.2	120.00	38	6.3×12
	3.3	80.40	55	8×12
	4.7	56.40	80	8×14
	5.6	47.30	100	8×16
	6.8	39.00	115	10×13
	8.2	32.30	128	10×16

UR (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C 120Hz	Rated Ripple Current 105°C120Hz	Size ΦD×L
(V)	(μF)	(Ω)	(mA rms)	(mm)
400(450)2G	10	26.50	145	10×16
	15	17.60	225	10×20
	18	14.70	250	10×25
	22	12.00	265	13×20
	27	9.80	320	13×20
	33	8.00	380	13×25
	47	5.60	460	16×25
	56	4.70	500	16×30
	68	3.90	595	16×30
	82	3.20	620	16×35
	100	2.60	775	18×30
	120	2.20	880	18×35
	150	1.70	995	18×40
	180	1.40	1185	22×35
	220	1.20	1360	22×40
420(470)W6	2.2	120.00	38	6.3×12
	3.3	80.40	52	8×12
	4.7	56.40	78	8×14
	5.6	47.30	100	8×16
	6.8	39.00	115	10×13
	8.2	32.30	126	10×16
	10	26.50	183	10×16
	15	17.60	235	10×20
	18	14.70	255	13×16
	22	12.00	280	13×20
	27	9.80	330	13×25
	33	8.00	385	13×25
	47	5.60	480	16×25
	56	4.70	535	16×30
	68	3.90	625	18×25
	82	3.20	720	18×30
	100	2.60	795	18×35
	120	2.20	895	18×40
	150	1.70	1150	22×35
	180	1.40	1260	22×40
450(500)2W	1	265.30	25	6.3×12
	2.2	120.00	38	8×12
	3.3	80.40	55	8×14
	4.7	56.40	80	8×16
	5.6	47.30	100	10×13
	6.8	39.00	115	10×16
	8.2	32.30	125	10×16
	10	26.50	185	10×20
	15	17.60	245	10×25
	18	14.70	275	13×20
	22	12.00	300	13×25
	27	9.80	335	16×20
	33	8.00	400	16×25
	47	5.60	490	16×30
	56	4.70	535	16×35
	68	3.90	640	18×30
	82	3.20	730	18×35
	100	2.60	815	18×40
	120	2.20	880	22×35
	150	1.70	1180	22×40
500(550)2H	2.2	120.00	53	8×12
	3.3	80.40	70	8×16
	4.7	56.40	88	10×16
	5.6	47.30	105	10×16
	6.8	39.00	118	10×20
	8.2	32.30	135	10×20
	10	26.50	150	10×25
	15	17.60	205	13×20
	18	14.70	220	13×25
	22	12.00	238	13×25
	27	9.80	270	16×20
	33	8.00	310	16×25
	47	5.60	430	16×30
	56	4.70	500	18×30
	68	3.90	545	18×35
	82	3.20	600	18×40
	100	2.60	695	22×35
	120	2.20	810	22×40