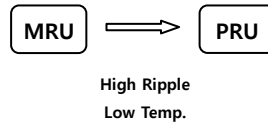




PRU series

- Long Life
- High-Ripple current
- RoHS compliant
- Low Temp.

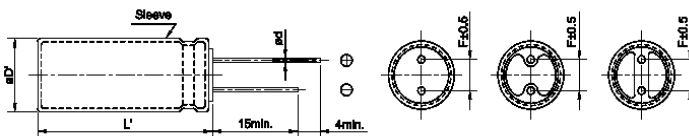
- 105°C 5,000~12,000Hrs assured.
- Long life, High ripple, Low Temp.
- For SMPS, LED power, IP-Board, Adaptor
- RoHS compliant
- Halogen-free capacitors are also available.



Specifications

Item	Characteristics
Rated Voltage Range	160 ~ 500 Vdc
Operating Temperature Range	-40 ~ +105°C
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)
Leakage Current	I=0.01CV+40(μA) at CV ≤ 1,000, I=0.03CV+15(μA) at CV > 1,000 (at 20°C, 1min) I=0.04CV+100(μA) at CV ≤ 1,000, I=0.02CV+25(μA) at CV > 1,000 (at 20°C, 5min) Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(Vdc)
Dissipation Factor(Tanδ)	Rated voltage (Vdc) 160 ~ 250 350 ~ 500
	Tanδ (max.) 0.20 0.24
Temperature characteristics (Max, impedance ratio)	Rated voltage (Vdc) 160 ~ 250 350 ~ 400 450 ~ 500
	Z(-25°C)/Z(20°C) 3 3 3
	Z(-40°C)/Z(20°C) 6 6 6
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for specified life times at 105°C12,000hrs. (5,000hrs for 6.3Ø, 8,000hrs for 8Ø, 10,000hrs for 10Ø) Capacitance change ≤±20%of the initial value Tan δ ≤200% of the initial specified value Leakage current ≤The initial specified value
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤±20% of the initial value Tanδ ≤200% of the initial specified value Leakage current ≤500%The initial specified value

Dimensions

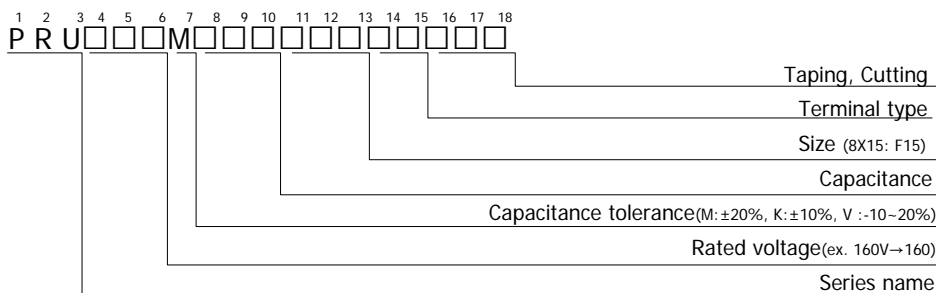


Unit(mm)

ØD	6.3	8	10	12.5	16	18	20
Ød	0.5	0.6	0.6	0.6	0.8	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5	7.5
ØD'	ØD+0.5 max.						
L'	L+1.5 max		L+2.0 max				

- Printed silver color letter on PET dark blue sleeve

Code numbering system



Ø8	F
Ø10	G
Ø12.5	X
Ø16	J
Ø18	K
Ø20	L



PRU series

■ Standard Ratings

Note1) Ripple current = mArms/105°C, 120Hz

VV (Vdc)	Cap (uF)	Size ØxL (mm)	Tan δ	Ripple ¹⁾	Code No
160	6.8	8 x 11.5	0.20	91	PRU160□6R8F12CS□□□
	10	8 x 15	0.20	124	PRU160□100F15CS□□□
	15	8 x 15	0.20	150	PRU160□150F15CS□□□
	22	10 x 12.5	0.20	224	PRU160□220G13CS□□□
		10 x 16	0.20	247	PRU160□220G16CS□□□
	27	10 x 12.5	0.20	242	PRU160□270G13CS□□□
		10 x 16	0.20	264	PRU160□270G16CS□□□
	33	10 x 16	0.20	272	PRU160□330G16CS□□□
	39	10 x 16	0.20	296	PRU160□390G16CS□□□
	47	10 x 20	0.20	372	PRU160□470G20CS□□□
	56	10 x 20	0.20	388	PRU160□560G20CS□□□
	68	10 x 20	0.20	404	PRU160□680G20CS□□□
	82	12.5 x 20	0.20	498	PRU160□820X20CS□□□
	100	12.5 x 20	0.20	562	PRU160□101X20CS□□□
	120	12.5 x 25	0.20	642	PRU160□121X25CS□□□
	150	16 x 25	0.20	830	PRU160□151J25CS□□□
	180	16 x 25	0.20	895	PRU160□181J25CS□□□
	220	16 x 31.5	0.20	972	PRU160□221J32CS□□□
		18 x 25	0.20	972	PRU160□221K25CS□□□
	270	16 x 35.5	0.20	1,108	PRU160□271J36CS□□□
330	16 x 40	0.20	1,272	PRU160□331J40CS□□□	
	18 x 31.5	0.20	1,238	PRU160□331K32CS□□□	
390	18 x 35.5	0.20	1,386	PRU160□391K36CS□□□	
470	18 x 40	0.20	1,552	PRU160□471K40CS□□□	
200	4.7	8 x 11.5	0.20	78	PRU200□4R7F12CS□□□
	6.8	8 x 11.5	0.20	105	PRU200□6R8F12CS□□□
	8.2	8 x 11.5	0.20	112	PRU200□8R2F12CS□□□
	10	8 x 15	0.20	118	PRU200□100F15CS□□□
		8 x 20	0.20	142	PRU200□100F20CS□□□
	15	8 x 15	0.20	150	PRU200□150F15CS□□□
	22	10 x 12.5	0.20	223	PRU200□220G13CS□□□
		10 x 16	0.20	248	PRU200□220G16CS□□□
	27	10 x 16	0.20	268	PRU200□270G16CS□□□
	33	10 x 20	0.20	310	PRU200□330G20CS□□□
	39	10 x 20	0.20	338	PRU200□390G20CS□□□
	47	10 x 20	0.20	373	PRU200□470G20CS□□□
		12.5 x 20	0.20	443	PRU200□470X20CS□□□
	56	12.5 x 20	0.20	524	PRU200□560X20CS□□□
	68	12.5 x 25	0.20	598	PRU200□680X25CS□□□
	82	12.5 x 25	0.20	618	PRU200□820X25CS□□□
		16 x 20	0.20	604	PRU200□820J20CS□□□
	100	12.5 x 30	0.20	704	PRU200□101X30CS□□□
		16 x 25	0.20	721	PRU200□101J25CS□□□
	120	12.5 x 35	0.20	818	PRU200□121X35CS□□□
16 x 25		0.20	788	PRU200□121J25CS□□□	
150	16 x 25	0.20	840	PRU200□151J25CS□□□	
180	16 x 31.5	0.20	940	PRU200□181J32CS□□□	
220	18 x 31.5	0.20	1,108	PRU200□221K32CS□□□	
270	18 x 35.5	0.20	1,268	PRU200□271K36CS□□□	
330	18 x 40	0.20	1,380	PRU200□331K40CS□□□	
250	4.7	8 x 15	0.20	82	PRU250□4R7F12CS□□□
	6.8	8 x 20	0.20	108	PRU250□6R8F20CS□□□
		10 x 12.5	0.20	120	PRU250□6R8G13CS□□□
	8.2	10 x 12.5	0.20	142	PRU250□8R2G13CS□□□
	10	10 x 12.5	0.20	162	PRU250□100G13CS□□□
	15	10 x 12.5	0.20	176	PRU250□150G13CS□□□
	22	10 x 16	0.20	234	PRU250□220G20CS□□□
	27	10 x 20	0.20	276	PRU250□270G20CS□□□
33	12.5 x 20	0.20	328	PRU250□330X20CS□□□	

VV (Vdc)	Cap (uF)	Size ØxL (mm)	Tan δ	Ripple ¹⁾	Code No	
250	39	12.5 x 20	0.20	358	PRU250□390X20CS□□□	
	47	12.5 x 20	0.20	446	PRU250□470X20CS□□□	
	56	12.5 x 25	0.20	518	PRU250□560X25CS□□□	
	68	12.5 x 25	0.20	598	PRU250□680X25CS□□□	
	82	12.5 x 30	0.20	664	PRU250□820X30CS□□□	
	100	16 x 25	0.20	720	PRU250□101J25CS□□□	
	120	16 x 25	0.20	788	PRU250□121J25CS□□□	
	150	18 x 25	0.20	906	PRU250□151K25CS□□□	
	180	18 x 31.5	0.20	1,016	PRU250□181K32CS□□□	
	220	18 x 31.5	0.20	1,108	PRU250□221K32CS□□□	
	270	18 x 35.5	0.20	1,250	PRU250□271K36CS□□□	
	330	18 x 40	0.20	1,348	PRU250□331K40CS□□□	
	350	4.7	8 x 11.5	0.24	94	PRU350□4R7F12CS□□□
		6.8	8 x 15	0.24	102	PRU350□6R8F15CS□□□
8.2		10 x 12.5	0.24	132	PRU350□8R2G13CS□□□	
10		10 x 12.5	0.24	156	PRU350□100G13CS□□□	
		10 x 16	0.24	156	PRU350□100G16CS□□□	
15		10 x 20	0.24	200	PRU350□150G20CS□□□	
22		12.5 x 20	0.24	301	PRU350□220X20CS□□□	
27		12.5 x 20	0.24	316	PRU350□270X20CS□□□	
33		12.5 x 20	0.24	322	PRU350□330X20CS□□□	
39		12.5 x 25	0.24	354	PRU350□390X25CS□□□	
47		12.5 x 30	0.24	455	PRU350□470X30CS□□□	
68		16 x 25	0.24	610	PRU350□680J25CS□□□	
82		18 x 25	0.24	690	PRU350□820K25CS□□□	
100		18 x 31.5	0.24	820	PRU350□101K32CS□□□	
120	18 x 35.5	0.24	926	PRU350□121K36CS□□□		
150	18 x 35.5	0.24	1,040	PRU350□151K36CS□□□		
180	18 x 40	0.24	1,160	PRU350□181K40CS□□□		
400	1.0	6.3 x 11	0.24	22	PRU400□1R0E11CS□□□	
	1.5	6.3 x 15	0.24	32	PRU400□1R5E15CS□□□	
		8 x 11.5	0.24	34	PRU400□1R5F12CS□□□	
	2.2	8 x 11.5	0.24	42	PRU400□2R2F12CS□□□	
	3.3	8 x 11.5	0.24	52	PRU400□3R3F12CS□□□	
	4.7	8 x 11.5	0.24	62	PRU400□4R7F12CS□□□	
	5.6	8 x 15	0.24	94	PRU400□5R6F15CS□□□	
	6.8	8 x 15	0.24	102	PRU400□6R8F15CS□□□	
	8.2	8 x 20	0.24	120	PRU400□8R2F20CS□□□	
		10 x 12.5	0.24	132	PRU400□8R2G13CS□□□	
	10	10 x 16	0.24	148	PRU400□100G16CS□□□	
	22	12.5 x 20	0.24	300	PRU400□220X20CS□□□	
	27	12.5 x 20	0.24	318	PRU400□270X20CS□□□	
	33	12.5 x 25	0.24	345	PRU400□330X25CS□□□	
	39	12.5 x 25	0.24	358	PRU400□390X25CS□□□	
		12.5 x 30	0.24	384	PRU400□390X30CS□□□	
	47	12.5 x 35	0.24	466	PRU400□470X35CS□□□	
		16 x 25	0.24	484	PRU400□470J25CS□□□	
68	12.5 x 40	0.24	554	PRU400□680X40CS□□□		
	18 x 25	0.24	633	PRU400□680K25CS□□□		
82	18 x 31.5	0.24	780	PRU400□820K32CS□□□		
100	18 x 31.5	0.24	820	PRU400□101K32CS□□□		
	18 x 35.5	0.24	880	PRU400□101K36CS□□□		
120	18 x 35.5	0.24	930	PRU400□121K36CS□□□		
	18 x 40	0.24	1,010	PRU400□121K40CS□□□		
150	18 x 40	0.24	1,130	PRU400□151K40CS□□□		
180	18 x 45	0.24	1,200	PRU400□181K45CS□□□		
	20 x 40	0.24	1,200	PRU400□181L40CS□□□		



WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
420	1.0	6.3 x 11	0.24	18	PRU420□1R0E11CS□□□
	1.5	6.3 x 15	0.24	25	PRU420□1R5E15CS□□□
		8 x 11.5	0.24	26	PRU420□1R5F12CS□□□
	2.2	8 x 11.5	0.24	31	PRU420□2R2F12CS□□□
	3.3	8 x 11.5	0.24	38	PRU420□3R3F12CS□□□
	4.7	8 x 11.5	0.24	45	PRU420□4R7F12CS□□□
	5.6	8 x 15	0.24	88	PRU420□5R6F15CS□□□
	6.8	8 x 20	0.24	107	PRU420□6R8F20CS□□□
	8.2	10 x 16	0.24	115	PRU420□8R2G16CS□□□
	10	10 x 20	0.24	138	PRU420□100G20CS□□□
	22	12.5 x 20	0.24	228	PRU420□220X20CS□□□
	27	12.5 x 20	0.24	259	PRU420□270X20CS□□□
	33	12.5 x 30	0.24	345	PRU420□330X30CS□□□
		16 x 20	0.24	350	PRU420□330J20CS□□□
	39	12.5 x 35	0.24	385	PRU420□390X35CS□□□
		16 x 25	0.24	404	PRU420□390J25CS□□□
	47	12.5 x 40	0.24	454	PRU420□470X40CS□□□
		16 x 25	0.24	455	PRU420□470J25CS□□□
	68	18 x 25	0.24	524	PRU420□680K25CS□□□
		18 x 31.5	0.24	584	PRU420□680K32CS□□□
82	18 x 25	0.24	604	PRU420□820K25CS□□□	
	18 x 31.5	0.24	655	PRU420□820K32CS□□□	
100	16 x 45	0.24	774	PRU420□101J45CS□□□	
	18 x 35.5	0.24	774	PRU420□101K36CS□□□	
120	16 x 50	0.24	854	PRU420□121J50CS□□□	
	18 x 40	0.24	854	PRU420□121K40CS□□□	
150	18 x 45	0.24	1,010	PRU420□151K45CS□□□	
	20 x 40	0.24	1,010	PRU420□151L40CS□□□	
180	18 x 50	0.24	1,158	PRU420□181K50CS□□□	
	20 x 45	0.24	1,158	PRU420□181L45CS□□□	
450	1.0	6.3 x 11	0.24	18	PRU450□1R0E11CS□□□
	1.5	6.3 x 15	0.24	24	PRU450□1R5E15CS□□□
	2.2	8 x 11.5	0.24	35	PRU450□2R2F12CS□□□
	3.3	8 x 11.5	0.24	38	PRU450□3R3F12CS□□□
	4.7	10 x 12.5	0.24	78	PRU450□4R7G13CS□□□
	5.6	8 x 15	0.24	1	PRU450□5R6F15CS□□□
	6.8	8 x 20	0.24	107	PRU450□6R8F20CS□□□
	8.2	10 x 16	0.24	115	PRU450□8R2G16CS□□□
	10	10 x 20	0.24	138	PRU450□100G20CS□□□
	22	12.5 x 25	0.24	253	PRU450□220X25CS□□□
	27	12.5 x 25	0.24	265	PRU450□270X25CS□□□
	33	12.5 x 30	0.24	342	PRU450□330X30CS□□□
		16 x 20	0.24	348	PRU450□330J20CS□□□
	39	12.5 x 35	0.24	384	PRU450□390X35CS□□□
		16 x 25	0.24	405	PRU450□390J25CS□□□
	47	12.5 x 40	0.24	452	PRU450□470X40CS□□□
		16 x 25	0.24	452	PRU450□470J25CS□□□
	68	16 x 35	0.24	562	PRU450□680J35CS□□□
		18 x 31.5	0.24	594	PRU450□680K32CS□□□
	82	16 x 40	0.24	652	PRU450□820J40CS□□□
18 x 31.5		0.24	654	PRU450□820K32CS□□□	
100	16 x 45	0.24	774	PRU450□101J45CS□□□	
	18 x 35.5	0.24	780	PRU450□101K36CS□□□	
120	16 x 50	0.24	854	PRU450□121J50CS□□□	
	18 x 40	0.24	854	PRU450□121K40CS□□□	

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
500	2.2	8 x 11.5	0.24	46	PRU500□2R2F12CS□□□
	3.3	10 x 12.5	0.24	64	PRU500□3R3G13CS□□□
	4.7	10 x 12.5	0.24	75	PRU500□4R7G13CS□□□
	5.6	10 x 16	0.24	92	PRU500□5R6G16CS□□□
	6.8	10 x 16	0.24	112	PRU500□6R8G16CS□□□
	8.2	10 x 20	0.24	142	PRU500□8R2G20CS□□□
	10	12.5 x 20	0.24	167	PRU500□100X20CS□□□
	22	12.5 x 30	0.24	264	PRU500□220X30CS□□□
	27	12.5 x 40	0.24	332	PRU500□270X40CS□□□
	33	12.5 x 45	0.24	372	PRU500□330X45CS□□□
		16 x 25	0.24	354	PRU500□330J25CS□□□
	39	12.5 x 50	0.24	424	PRU500□390X50CS□□□
		16 x 31.5	0.24	416	PRU500□390J32CS□□□
	47	16 x 35.5	0.24	466	PRU500□470J36CS□□□
		18 x 31.5	0.24	472	PRU500□470K32CS□□□
	68	16 x 45	0.24	632	PRU500□680J45CS□□□
		18 x 35.5	0.24	600	PRU500□680K36CS□□□
	82	16 x 50	0.24	686	PRU500□820J50CS□□□
		18 x 40	0.24	674	PRU500□820K40CS□□□
	100	18 x 45	0.24	804	PRU500□101K45CS□□□
20 x 40		0.24	806	PRU500□101L40CS□□□	
120	22 x 35	0.24	806	PRU500□101M35CS□□□	
	18 x 50	0.24	924	PRU500□121K50CS□□□	

■ Rated ripple current multipliers

Frequency (Hz)	120	1K	10K	50K	100K
1 ~ 82 uF	1.00	1.75	2.25	2.35	2.50
100 ~ 470uF	1.00	1.67	2.05	2.15	2.25