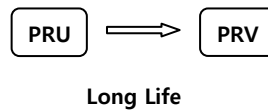


PRV series

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

- 105°C 12,000~15,000Hrs assured.
- Long life, High ripple, Low Temp.
- For SMPS, LED power, IP-Board, Adaptor
- RoHS compliant
- Halogen-free capacitors are also available.

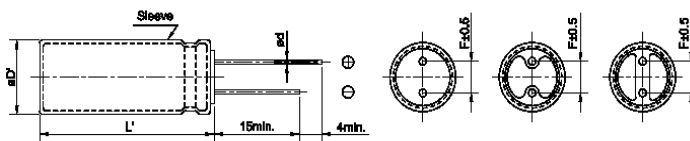


Specifications

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)	<table border="1"> <tr> <td>Rated voltage (Vdc)</td> <td>160 ~ 250</td> <td>350 ~ 500</td> </tr> <tr> <td>Tanδ (max.)</td> <td>0.20</td> <td>0.24</td> </tr> </table> (at 20°C, 120Hz)	Rated voltage (Vdc)	160 ~ 250	350 ~ 500	Tanδ (max.)	0.20	0.24						
Rated voltage (Vdc)	160 ~ 250	350 ~ 500											
Tanδ (max.)	0.20	0.24											
Temperature characteristics (Max,impedance ratio)	<table border="1"> <tr> <td>Rated voltage (Vdc)</td> <td>160 ~ 250</td> <td>350 ~ 400</td> <td>450 ~ 500</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>6</td> <td>6</td> <td>6</td> </tr> </table> (at 120Hz)	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
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°C15,000hrs. (12,000hrs for 10∅) 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

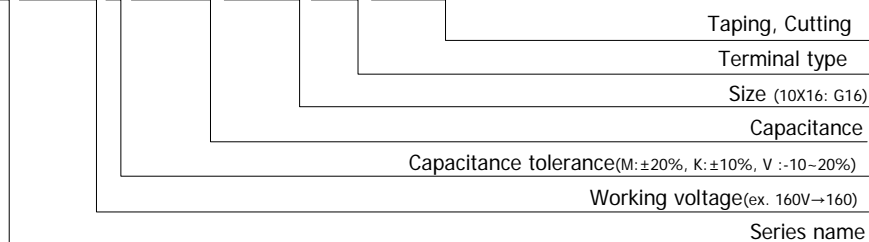
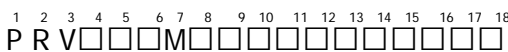
Unit(mm)



ØD	10	12.5	16	18	20	22
Ød	0.6	0.6	0.8	0.8	0.8	0.8
F	5.0	5.0	7.5	7.5	7.5	10.0
ØD'	ØD+0.5 max.					
L'	L+2.0 max					

- Printed black color letter on PET red sleeve

Code numbering system



Ø10	G
Ø12.5	X
Ø16	J
Ø18	K
Ø20	L
Ø22	M



PRV series

■ Standard Ratings Note1) Ripple current = mA rms/105°C, 120Hz

VV (Vdc)	Cap (uF)	Size ØxL (mm)	Tan δ	Ripple ¹⁾	Code No
160	22	10 x 12.5	0.20	224	PRV160□220G13CS□□□
		10 X 16	0.20	246	PRV160□220G16CS□□□
	27	10 x 16	0.20	266	PRV160□270G16CS□□□
	33	10 x 16	0.20	272	PRV160□330G16CS□□□
	39	10 x 20	0.20	326	PRV160□390G20CS□□□
	47	10 x 20	0.20	372	PRV160□470G20CS□□□
	56	10 x 20	0.20	424	PRV160□560G20CS□□□
	68	10 x 33	0.20	486	PRV160□680G33CS□□□
	82	10 x 33	0.20	524	PRV160□820G33CS□□□
		12.5 x 25	0.20	530	PRV160□820X25CS□□□
	100	12.5 x 25	0.20	580	PRV160□101X25CS□□□
	120	10 x 50	0.20	706	PRV160□121G50CS□□□
		12.5 x 30	0.20	676	PRV160□121X30CS□□□
	150	16 x 25	0.20	828	PRV160□151J25CS□□□
	180	16 x 25	0.20	895	PRV160□181J25CS□□□
	220	16 x 31.5	0.20	972	PRV160□221J32CS□□□
		18 x 25	0.20	972	PRV160□221K25CS□□□
	270	16 x 35.5	0.20	1,106	PRV160□271J36CS□□□
330	18 x 31.5	0.20	1,236	PRV160□331K32CS□□□	
390	18 x 35.5	0.20	1,426	PRV160□391K36CS□□□	
470	18 x 45	0.20	1,632	PRV160□471K45CS□□□	
200	15	10 x 12.5	0.20	154	PRV200□150G13CS□□□
	22	10 x 16	0.20	246	PRV200□220G16CS□□□
	27	10 x 20	0.20	284	PRV200□270G20CS□□□
	33	10 x 20	0.20	310	PRV200□330G20CS□□□
	39	10 x 25	0.20	350	PRV200□390G25CS□□□
	47	10 x 33	0.20	452	PRV200□470G33CS□□□
		12.5 x 20	0.20	444	PRV200□470X20CS□□□
	56	12.5 x 20	0.20	502	PRV200□560X20CS□□□
	68	12.5 x 25	0.20	596	PRV200□680X25CS□□□
	82	12.5 x 30	0.20	648	PRV200□820X30CS□□□
		16 x 20	0.20	620	PRV200□820J20CS□□□
	100	12.5 x 35	0.20	744	PRV200□101X35CS□□□
		16 x 25	0.20	722	PRV200□101J25CS□□□
	120	12.5 x 40	0.20	854	PRV200□121X40CS□□□
		16 x 25	0.20	788	PRV200□121J25CS□□□
	150	16 x 31.5	0.20	815	PRV200□151J32CS□□□
	180	16 x 35.5	0.20	955	PRV200□181J36CS□□□
	220	18 x 31.5	0.20	1,108	PRV200□221K32CS□□□
270	18 x 40	0.20	1,298	PRV200□271K40CS□□□	
330	18 x 45	0.20	1,394	PRV200□331K45CS□□□	
250	6.8	10 x 12.5	0.20	120	PRV250□68G13CS□□□
	10	10 x 12.5	0.20	162	PRV250□100G13CS□□□
	15	10 x 16	0.20	224	PRV250□150G16CS□□□
	22	10 x 20	0.20	240	PRV250□220G20CS□□□
	27	10 x 20	0.20	272	PRV250□270G20CS□□□
	33	12.5 x 20	0.20	325	PRV250□330X20CS□□□
	39	12.5 x 20	0.20	354	PRV250□390X20CS□□□
	47	12.5 x 25	0.20	464	PRV250□470X25CS□□□
	68	12.5 x 30	0.20	614	PRV250□680X30CS□□□
	82	12.5 x 35	0.20	685	PRV250□820X35CS□□□
	100	16 x 25	0.20	720	PRV250□101J25CS□□□
	120	16 x 31.5	0.20	806	PRV250□121J32CS□□□
150	16 x 35.5	0.20	908	PRV250□151J36CS□□□	
180	18 x 31.5	0.20	1,016	PRV250□181K32CS□□□	
220	18 x 35.5	0.20	1,128	PRV250□221K36CS□□□	
350	6.8	10 x 12.5	0.24	106	PRV350□68G13CS□□□
	10	10 x 16	0.24	151	PRV350□100G16CS□□□
	15	10 x 20	0.24	200	PRV350□150G20CS□□□
	22	12.5 x 20	0.24	300	PRV350□220X20CS□□□

VV (Vdc)	Cap (uF)	Size ØxL (mm)	Tan δ	Ripple ¹⁾	Code No
350	27	12.5 x 20	0.24	316	PRV350□270X20CS□□□
	33	12.5 x 25	0.24	328	PRV350□330X25CS□□□
	39	12.5 x 25	0.24	356	PRV350□390X25CS□□□
	47	12.5 x 30	0.24	454	PRV350□470X30CS□□□
	56	12.5 x 35	0.24	486	PRV350□560X35CS□□□
	68	16 x 31.5	0.24	626	PRV350□680J32CS□□□
	82	18 x 25	0.24	690	PRV350□820K25CS□□□
	100	18 x 31.5	0.24	820	PRV350□101K32CS□□□
	120	18 x 35.5	0.24	928	PRV350□121K36CS□□□
	150	18 x 40	0.24	1,088	PRV350□151K40CS□□□
400	180	18 x 45	0.24	1,236	PRV350□181K45CS□□□
	8.2	10 x 16	0.24	144	PRV400□82G16CS□□□
	10	10 x 16	0.24	148	PRV400□100G16CS□□□
	22	12.5 x 20	0.24	300	PRV400□220X20CS□□□
	27	12.5 x 25	0.24	334	PRV400□270X25CS□□□
	33	12.5 x 30	0.24	360	PRV400□330X30CS□□□
	39	12.5 x 35	0.24	406	PRV400□390X35CS□□□
	47	12.5 x 40	0.24	490	PRV400□470X40CS□□□
		16 x 25	0.24	482	PRV400□470J25CS□□□
	56	12.5 x 45	0.24	526	PRV400□560X45CS□□□
16 x 31.5		0.24	552	PRV400□560J32CS□□□	
68	12.5 x 50	0.24	580	PRV400□680X50CS□□□	
82	16 x 35.5	0.24	630	PRV400□680J36CS□□□	
	16 x 40	0.24	776	PRV400□820J40CS□□□	
100	18 x 35.5	0.24	878	PRV400□101K36CS□□□	
120	18 x 40	0.24	1,008	PRV400□121K40CS□□□	
150	18 x 50	0.24	1,198	PRV400□151K50CS□□□	
420	8.2	10 x 16	0.24	115	PRV420□82G16CS□□□
	10	10 x 20	0.24	138	PRV420□100G20CS□□□
	22	12.5 x 25	0.24	254	PRV420□220X25CS□□□
	27	12.5 x 25	0.24	282	PRV420□270X25CS□□□
	33	12.5 x 30	0.24	364	PRV420□330X30CS□□□
		16 x 20	0.24	366	PRV420□330J20CS□□□
	39	12.5 x 35	0.24	404	PRV420□390X35CS□□□
		16 x 25	0.24	426	PRV420□390J25CS□□□
	47	12.5 x 40	0.24	472	PRV420□470X40CS□□□
		16 x 25	0.24	480	PRV420□470J25CS□□□
	56	12.5 x 50	0.24	524	PRV420□560X50CS□□□
		16 x 35.5	0.24	540	PRV420□560J36CS□□□
68	18 x 31.5	0.24	584	PRV420□680K32CS□□□	
82	16 x 40	0.24	654	PRV420□820J40CS□□□	
100	18 x 35.5	0.24	798	PRV420□101K36CS□□□	
120	18 x 45	0.24	946	PRV420□121K45CS□□□	
450	4.7	10 x 12.5	0.24	76	PRV450□47G13CS□□□
	6.8	10 x 16	0.24	112	PRV450□68G16CS□□□
	8.2	10 x 20	0.24	124	PRV450□82G20CS□□□
	10	10 x 20	0.24	136	PRV450□100G20CS□□□
	22	12.5 x 25	0.24	252	PRV450□220X25CS□□□
	27	12.5 x 30	0.24	284	PRV450□270X30CS□□□
	33	12.5 x 35	0.24	360	PRV450□330X35CS□□□
		16 x 25	0.24	362	PRV450□330J25CS□□□
	39	12.5 x 40	0.24	402	PRV450□390X40CS□□□
		16 x 31.5	0.24	424	PRV450□390J32CS□□□
	47	12.5 x 50	0.24	472	PRV450□470X50CS□□□
		16 x 31.5	0.24	480	PRV450□470J32CS□□□
56	16 x 35.5	0.24	532	PRV450□560J36CS□□□	
68	18 x 31.5	0.24	582	PRV450□680K32CS□□□	



PRV series

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

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
450	82	18 x 35.5	0.24	652	PRV450□820K36CS□□□
	100	18 x 40	0.24	798	PRV450□101K40CS□□□
	120	18 x 50	0.24	942	PRV450□121K50CS□□□
500	3.3	10 x 12.5	0.24	64	PRV500□3R3G13CS□□□
	4.7	10 x 16	0.24	84	PRV500□4R7G16CS□□□
	6.8	10 x 20	0.24	120	PRV500□6R8G20CS□□□
	8.2	10 x 20	0.24	143	PRV500□8R2G20CS□□□
	10	12.5 x 20	0.24	167	PRV500□100X20CS□□□
	22	12.5 x 35	0.24	262	PRV500□220X35CS□□□
	27	12.5 x 40	0.24	331	PRV500□270X40CS□□□
	33	12.5 x 45	0.24	374	PRV500□330X45CS□□□
		16 x 31.5	0.24	384	PRV500□330J32CS□□□
	39	12.5 x 50	0.24	422	PRV500□390X50CS□□□
		16 x 35.5	0.24	436	PRV500□390J36CS□□□
	47	18 x 31.5	0.24	470	PRV500□470K32CS□□□
	68	18 x 40	0.24	632	PRV500□680K40CS□□□
	82	18 x 45	0.24	688	PRV500□820K45CS□□□
	100	22 x 40	0.24	804	PRV500□101M40CS□□□
120	22 x 50	0.24	966	PRV500□121M50CS□□□	

Rated ripple current multipliers

Freq.(Hz)	120	1K	10K	50K	100K
Cap.(uF)					
3.3 ~ 82	1.00	1.75	2.25	2.35	2.50
100 ~ 470	1.00	1.67	2.05	2.15	2.25