

Miniature Sized, Low Impedance, High Reliability For Switching Power Supplies



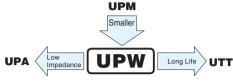


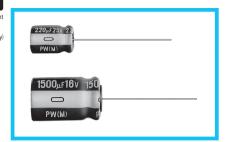






- Smaller case size and lower impedance than UPM.
- Low impedance and high reliability withstanding 2000 hours to 8000 hours.
- Capacitance ranges available based on the numerical values in E12 series under JIS.
- Compliant to the RoHS directive (2011/65/EU).

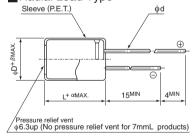




■ Specifications

Item				Perforn	nance Ch	aracteris	stics				
Category Temperature Range	$-55 \text{ to } +105^{\circ}\text{C}$ (6.	3 to 100V), -4	40 to + 105°C (160 to 400	V), -25 to	+105°C	(450V)				
Rated Voltage Range	6.3 to 450V										
Rated Capacitance Range	0.47 to 15000μF										
Capacitance Tolerance	±20% at 120Hz, 2	20°C									
Leakage Current	Rated voltage (V) Leakage current		6.3 to application of rated n 0.03CV or 4 (μΑ)	voltage at 20			CV ≦ 1000 : I = CV > 1000 : I =	= 0.1CV+40			
Tangent of loss angle (tan δ)	For capacitance of n Rated voltage (V) tan δ (MAX.)	6.3 1	F, add 0.02 for 6	25 0.14	35 0.12	50 0.10	63 0.09	100 0.08	160 to 250 0.15		400 · 450 0.25
Stability at Low Temperature	Rated v Impedance ratio (MAX.)	oltage (V) Z-25°C / Z+2 Z-40°C / Z+2 Z-55°C / Z+2	0°C —	16 · 25 — — 3	35 · 50 — — 3	63 · 10 — — 3	00 160 · 200 3 4	250 3 6 —	315 · 350 4 8 —	400 6 10	120Hz 450 15 —
Endurance	capacitors are resripple current is ap 5 and 6.3, 3000 ho hours for φD=12.	e specifications listed at right shall be met when the pacitors are restored to 20°C after D.C. bias plus rated ple current is applied for 8000 hours (2000 hours for ϕ D=4, and 6.3, 3000 hours for ϕ D=8, 5000 hours for ϕ D=10.5) at 105°C, the peak voltage shall not ceed the rated voltage.								d value	
Shelf Life	After storing the ca									sed on JIS	C 5101-4

■Radial Lead Type



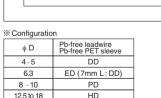


	(L = 7) 1.0					
α	(L < 20) 1.5					
	(L≥20) 2.0					

											(111111)
φD	4	5	6.3	8	10	12.5	16	18	20	22	25
Р	1.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	10.0	12.5
φd	0.45	0.5 (0.45)	0.5 (0.45)	0.6	0.6	0.6 ※0.8	0.8	0.8	1.0	1.0	1.0
β	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0

*: Applied to L>25 products
(): Applied to 7mmL products

20 to 25



RD

1 2 3 4 5 6 7 8 9 10 11 12 U P W 1 A 6 8 1 M P D

Type numbering system (Example: 10V 680µF)

• Frequency coefficient of rated ripple current

	_		1			
V	Cap. (µF) Frequency	50Hz	120Hz	300Hz	1kHz	10kHz or more
	2.2 to 56	0.20	0.30	0.50	0.80	1.00
0.01, 100	68 to 330	0.55	0.65	0.75	0.85	1.00
6.3 to 100	390 to 1000	0.70	0.75	0.80	0.90	1.00
	1200 to 15000	0.80	0.85	0.90	0.95	1.00
100 150	0.47 to 220	0.80	1.00	1.25	1.40	1.60
160 to 450	330 to 470	0.90	1.00	1.10	1.13	1.15

Please refer to page 20, 21, 22 about the formed or taped product spec. Please refer to page 4 for the minimum order quantity.

Size code Configuration ※

> Series name Type

Capacitance tolerance (±20%)

Rated capacitance (680µF)
Rated voltage (10V)

[•] Please refer to page 20 about the end seal configuration.

■Standard Ratings

	V (Code)		6.3 (0	DJ)			10 (1	A)	
	Item	Case size	Impedance	e (Ω) MAX.	Rated ripple	Case size	Impedance	e (Ω) MAX.	Rated ripple
Cap.(µF)	Code	φD × L (mm)	20°C / 100kHz	-10°C / 100kHz	(mArms) 105°C / 100kHz	φD × L (mm)	20°C / 100kHz	-10°C / 100kHz	(mArms) 105°C / 100kH
		(11111)				5 × 11	0.60	1.20	180
22	220	5 × 11	0.60	1.20	180	▲ 4 × 7	2.00	5.00	65
27	270	4 × 7	2.00	5.00	65		2.00	0.00	
		5 × 11	0.60	1.20	180	5 × 11	0.60	1.20	180
33	330	▲ 5×7	0.95	2.40	120	▲ 5×7	0.95	2.40	120
39	390	_				5 × 7	0.95	2.40	120
47		5 × 11	0.60	1.20	180	5 × 11	0.60	1.20	180
47	470	▲ 5×7	0.95	2.40	120	▲4×11	1.30	2.60	120
56	560	5 × 7	0.95	2.40	120				
68	680	4 × 11	1.30	2.60	120				
00	000					5 × 11	0.60	1.20	180
82	820					▲ 6.3×7	0.45	1.20	200
400	101	- 11		4.00	400	5 × 11	0.60	1.20	180
100	101	5 × 11	0.60	1.20	180	▲ 5×15	0.50	1.00	235
120	121	6.3 × 7	0.45	1.20	200				
150	151	6.3 × 11	0.25	0.50	290	6.3 × 11	0.05	0.50	000
150	151	▲ 5 × 15	0.50	1.00	235	6.3 × 11	0.25	0.50	290
180	181					6.3 × 11	0.25	0.50	290
220	001	6.3 × 11	0.05	0.50	000	6.3 × 11	0.25	0.50	290
220	221	6.3 × 11	0.25	0.50	290	▲ 6.3 × 15	0.23	0.46	430
330	201	6.3 × 11	0.25	0.50	290	011.5	0.117	0.004	EEE
330	331	▲ 6.3 × 15	0.23	0.46	430	8 × 11.5	0.117	0.234	555
470	471	8 × 11.5	0.117	0.234	555	8 × 11.5	0.117	0.234	555
560	561	8 × 11.5	0.117	0.234	555				
680	681	10 × 12.5	0.090	0.180	755	10 ×12.5	0.090	0.180	760
000	001	10 X 12.5	0.090	0.160	755	▲ 8×15	0.085	0.170	730
820	821	8 × 15	0.085	0.170	730				
020	021	▲ 10 × 12.5	0.090	0.180	755				
1000	102	10 × 12.5	0.090	0.180	755	10 × 16	0.068	0.136	1050
1000	102		0.030	0.100		▲ 8 × 20	0.065	0.130	995
1200	122	8 × 20	0.065	0.130	995	10 × 20	0.052	0.104	1220
1200	122	▲ 10 × 16	0.068	0.136	1050	10 \ 20	0.032	0.104	1220
1500	152	10 × 20	0.052	0.104	1220	10 × 20	0.052	0.104	1220
1000	102	10 % 20	0.002			▲10 × 25	0.045	0.090	1440
2200	222	12.5 × 20	0.038	0.076	1655	12.5 × 20	0.038	0.076	1655
		▲ 10 × 25	0.045	0.090	1440	▲ 10 × 31.5	0.035	0.070	1815
2700	272	10 × 31.5	0.035	0.070	1815	12.5 × 25	0.030	0.060	1945
3300	332	12.5 × 20	0.038	0.076	1655	12.5 × 25	0.030	0.060	1950
	552	.2.5 / 20	2.300	5.570	. 555	▲ 12.5 × 31.5	0.025	0.050	2310
3900	392	12.5 × 25	0.030	0.060	1945	12.5 × 35.5	0.022	0.044	2510
						▲ 16 × 20	0.029	0.058	2210
4700	472	16 × 25	0.022	0.044	2555	16 × 25	0.022	0.044	2555
		▲ 12.5 × 31.5	0.025	0.050	2310				
5600	562	12.5 × 35.5	0.022	0.044	2510	16 × 25	0.022	0.044	2560
		▲ 16 × 20	0.029	0.058	2210	▲ 18 × 20	0.028	0.056	2490
6800	682	16 × 25	0.022	0.044	2560	16 × 31.5	0.018	0.036	3010
		▲ 18 × 20	0.028	0.056	2490	▲ 18 × 25	0.020	0.040	2740
8200	822	16 × 31.5	0.018	0.036	3010	16 × 35.5	0.016	0.032	3150
						▲ 18 × 31.5	0.016	0.032	3635
10000	103	16 × 31.5	0.016	0.032	3150	18 × 35.5	0.015	0.030	3680
10000		▲ 18 × 25	0.020	0.040	2740				
12000	123	18 × 31.5	0.016	0.032	3635	10 10	0.011	0.000	0000
15000	153	18 × 35.5	0.015	0.030	3680	18 × 40	0.014	0.028	3800

^{▲:} In this case, 6 will be put at 12th digit of type numbering system.

■Standard Ratings

	V(Code)		16 (1	C)			25 (1	F)	
		Case size		e (Ω) MAX.	Rated ripple	Case size	Impedance	-	Rated ripple
	Item	$\phi D \times L$	20°C / 100kHz	-10°C / 100kHz	(mArms)	$\phi D \times L$	20°C / 100kHz	-10°C / 100kHz	(mArms)
Cap. (µF)	Code	(mm)	20 C / TOURHZ	-10 C / 100KHZ	105°C / 100kHz	(mm)		1.20	105°C / 100kHz 180
4.7	4R7					5 × 11	0.60	1.20	180
10	100	5 × 11	0.60	1.20	180	5 × 11 ▲4 × 7	2.00	5.00	180 65
45	450	4 7	0.00	F 00	0.5	▲4 × /	2.00	3.00	05
15	150	4 × 7 5 × 11	2.00 0.60	5.00 1.20	65 180	5 × 11	0.60	1.20	180
22	220	<u>5 × 11</u> ▲ 5 × 7	0.95	2.40	120	<u>5 ^ 11</u>	0.95	2.40	120
27	270	5×7	0.95	2.40	120	4 × 11	1.30	2.60	120
	270	5 × 11	0.60	1.20	180	17711			
33	330	▲6.3×7	0.45	1.20	200	5 × 11	0.60	1.20	180
						5 × 11	0.60	1.20	180
39	390	4 × 11	1.30	2.60	120	▲ 6.3 × 7	0.45	1.20	200
47	470	5 × 11	0.60	1.20	180	5 × 11	0.60	1.20	180
		5 × 11	0.60	1.20	180		0.50	1.00	005
56	560	▲ 6.3 × 7	0.45	1.20	200	5 × 15	0.50	1.00	235
82	820	5 × 15	0.50	1.00	235	6.3 × 11	0.25	0.50	290
100	101	6.3 × 11	0.25	0.50	290	6.3 × 11	0.25	0.50	290
120	121	6.3 × 11	0.25	0.50	290	6.3 × 15	0.23	0.46	430
150	151	6.3 × 11	0.25	0.50	290	8 × 11.5	0.117	0.234	555
180	181	6.3 × 15	0.23	0.46	430				
220	221	8 × 11.5	0.117	0.234	555	8 × 11.5	0.117	0.234	555
330	331	8 × 11.5	0.117	0.234	555	10 × 12.5	0.090	0.180	760
	331	0 × 11.5		0.234		▲ 8 × 15	0.085	0.170	730
470	471	10 × 12.5	0.090	0.180	760	10 × 16	0.068	0.136	1050
		▲8 × 15	0.085	0.170	730	▲8 × 20	0.065	0.130	995
560	561					10 × 20	0.052	0.104	1220
680	681	10 × 16	0.068	0.136	1050	10 × 20	0.052	0.104	1220
		▲8 × 20	0.065	0.130	995	10 05	0.045		
820	821	10 × 20	0.052	0.104	1220	10 × 25 12.5 × 20	0.045	0.090	1440
1000	102	10 × 20	0.052	0.104	1220	12.5 × 20 ▲10 × 31.5	0.038	0.076	1660
4000	400	40.05	2 2 4 5	0.000	1110	▲10 X 31.5	0.035	0.070	1815
1200	122	10 × 25	0.045	0.090	1440 1655	16 × 25	0.022	0.044	2555
1500	152	12.5 × 20	0.038	0.076 0.070	1815	10 ^ 25 12.5 × 25	0.030	0.060	1950
		▲10 × 31.5	0.035	0.070	1015	12.5 × 31.5	0.025	0.050	2310
1800	182					▲16 × 20	0.029	0.058	2210
						16 × 25	0.022	0.044	2555
2200	222	12.5 × 25	0.030	0.060	1945	▲18 × 20	0.028	0.056	2490
2200		12.5 × 25	0.000	0.000	1040	*12.5 × 35.5	0.022	0.044	2510
		12.5 × 31.5	0.025	0.050	2310				
2700	272	▲ 16 × 20	0.029	0.058	2210	16 × 25	0.022	0.044	2555
0000	000	16 × 25	0.022	0.044	2555	16 × 31.5	0.018	0.036	3010
3300	332	▲12.5 × 35.5	0.022	0.044	2510	▲ 18 × 25	0.020	0.040	2740
2000	000	16 × 25	0.022	0.044	2560	16 × 35.5	0.016	0.032	3150
3900	392	▲ 18 × 20	0.028	0.056	2490	▲18 × 31.5	0.016	0.032	3635
4700	470	16 × 31.5	0.018	0.036	3010	18 × 35.5	0.015	0.030	3680
4700	472	▲ 18 × 25	0.020	0.040	2740	10 × 30.0	0.015	0.030	3000
5600	560	16 × 35.5	0.016	0.032	3150				
3000	562	▲ 18 × 31.5	0.016	0.032	3635				
6800	682	18 × 35.5	0.015	0.030	3680	18 × 40	0.014	0.028	3800
8200	822	18 × 35.5	0.015	0.030	3680				
10000	103	18 × 40	0.014	0.028	3800				

^{▲:} In this case, 6 will be put at 12th digit of type numbering system.
※: In this case, 3 will be put at 12th digit of type numbering system.

■Standard Ratings

	V(Code)		35 (1	V)			50 (1	H)	_	
	Item	Case size	Impedance	e (Ω) MAX.	Rated ripple	Case size	Impedance	e (Ω) MAX.	Rated ripple	
Cap.(µF)	Code	φD × L (mm)	20°C / 100kHz	-10°C / 100kHz	(mArms) 105°C / 100kHz	φD × L (mm)	20°C / 100kHz	-10°C / 100kHz	(mArms) 105°C / 100kHz	
2.2	2R2	()				5 × 11	3.00	6.00	55	
3.3	3R3					5 × 11	2.60	5.20	65	
4.7	4R7	5 × 11	0.60	1.20	180	5 × 11	2.30	4.60	90	
6.8	6R8	4 × 7	2.00	5.00	65					
- 10		5 × 11	0.60	1.20	180	5 × 11	1.40	2.80	120	
10	100	▲ 5 × 7	0.95	2.40	120	▲ 4 × 11	2.50	5.00	90	
12	120	5 × 7	0.95	2.40	120					
18	180	4 × 11	1.30	2.60	120	5 × 11	1.30	2.60	155	
22	220	5 × 11	0.60	1.20	180	5 × 11	1.20	2.40	170	
		5 × 11	0.60	1.20	180					
27	270	▲ 6.3 × 7	0.45	1.20	200	5 × 15	0.90	1.80	215	
33	330	5 × 11	0.60	1.20	180	6.3 × 11	0.43	0.86	300	
39	390	5 × 15	0.50	1.00	235					
47	470	6.3 × 11	0.25	0.50	290	6.3 × 11	0.43	0.86	300	
56	560	6.3 × 11	0.25	0.50	290	6.3 × 15	0.40	0.80	360	
82	820	6.3 × 15	0.23	0.46	430	8 × 11.5	0.234	0.468	485	
100	101	8 × 11.5	0.117	0.234	555	8 × 11.5	0.234	0.468	485	
						8 × 15	0.155	0.310	635	
120	121					▲ 10 × 12.5	0.162	0.324	620	
150	151	8 × 11.5	0.117	0.234	555	10 × 12.5	0.162	0.324	615	
						8 × 20	0.120	0.240	24 620 24 615 10 860 38 850 36 1030	
180	181					▲ 10 × 16	0.119	0.238		
000	201	10 × 12.5	0.090	0.180	760	10 × 16	0.119	0.238		
220	221	▲ 8 × 15	0.085	0.170	730	▲ 10 × 20	0.090	0.180	1030	
270	271					10 × 25	0.082	0.164	1200	
	004	10 × 16	0.068	0.136	1050	10 × 20	0.090	0.180	1030	
330	331	▲ 8 × 20	0.065	0.130	995	▲ 10 × 31.5	0.060	0.120	1610	
390	391	10 × 20	0.052	0.104	1220	12.5 × 20	0.063	0.126	1480	
470	471	10 × 20	0.052	0.104	1220	12.5 × 20	0.060	0.120	1500	
560	561	10 × 25	0.045	0.090	1440	12.5 × 25	0.050	0.100	1832	
	1	12.5 × 20	0.038	0.076	1660	12.5 × 25	0.050	0.100	1840	
680	681	▲10×31.5	0.035	0.070	1815	▲ 16 × 20	0.048	0.096	1840	
200	004					12.5 × 35.5	0.034	0.068	2290	
820	821					▲ 18 × 20	0.042	0.084	2420	
1000	102	12.5 × 25	0.030	0.060	1950	16 × 25	0.034	0.068	2235	
1000	400	12.5 × 31.5	0.025	0.050	2310	16 × 31.5	0.028	0.056	2700	
1200	122	▲ 16 × 20	0.029	0.058	2210	▲ 18 × 25	0.029	0.058	2610	
4500	450	16 × 25	0.022	0.044	2555	16 × 31.5	0.028	0.056	2700	
1500	152	▲ 12.5 × 35.5	0.022	0.044	2510	▲ 16 × 35.5	0.025	0.050	2790	
1000	100	16 × 25	0.022	0.044	2555					
1800	182	▲ 18 × 20	0.028	0.056	2490	18 × 31.5	0.025	0.050	3000	
2002	000	16 × 31.5	0.018	0.036	3010	40.055	0.000	0.040	0400	
2200	222	▲ 18 × 25	0.020	0.040	2740	18 × 35.5	0.023	0.046	3100	
0700	0=0	16 × 35.5	0.016	0.032	3150					
2700	272	▲ 18 × 31.5	0.016	0.032	3635					
3300	332	18 × 35.5	0.015	0.030	3680					
4700	472	18 × 40	0.014	0.028	3800					

▲: In this case, 6 will be put at 12th digit of type numbering system.

■Standard Ratings

	V(Code)		63 (1	J)			100 (2A)	
	Item	Case size	Impedance	e (Ω) MAX.	Rated ripple	Case size	Impedance	e (Ω) MAX.	Rated ripple
Cap.(µF)	Code	φD × L (mm)	20°C / 100kHz	-10°C / 100kHz	(mArms) 105°C / 100kHz	$\phi D \times L$ (mm)	20°C / 100kHz	-10°C / 100kHz	(mArms) 105°C / 100kHz
2.2	2R2	,				5 × 11	9.80	19.6	44
3.3	3R3					5 × 11	6.60	13.2	58
4.7	4R7	5 × 11	4.70	9.40	68	5 × 11	4.60	9.20	74
6.8	CDO	5 × 11	2.50	5.00	95	E v 11	0.50	7.00	05
0.8	6R8	▲4×11	3.50	7.00	80	5 × 11	3.50	7.00	95
10	100	5 × 11	2.10	4.20	110	6.3 × 11	1.80	3.60	130
12	120	5 × 11	2.00	4.00	145				
15	150	6.3 × 11	1.20	2.40	160	8 × 11.5	0.83	1.66	180
18	180	5 × 15	1.30	2.60	200	6.3 × 15	0.80	1.60	200
22	220	6.3 × 11	0.71	1.42	250	8 × 11.5	0.68	1.36	230
33	330	6.3 × 11	0.71	1.42	250	10 × 12.5	0.46	0.92	320
	000			1.72	250	▲8×15	0.45	0.90	360
39	390	6.3 × 15	0.70	1.40	330				
47	470	8 × 11.5	0.342	0.684	405	10 × 16	0.37	0.74	420
						▲8×20	0.37	0.74	420
68	680	8 × 11.5	0.342	0.684	405	10 × 20	0.30	0.60	490
82	820					10 × 25	0.25	0.50	540
100	101	10 × 12.5	0.256	0.512	540	12.5 × 20	0.18	0.36	580
		▲8 × 15	0.230	0.460	535		-		
120	121	10 × 16	0.194	0.388	600	10 5 05			
150	151	10 × 16	0.194	0.388	660	12.5 × 25	0.13	0.26	710
180	181	10 × 20	0.147	0.294	890	12.5 × 31.5	0.12	0.24	790
		▲ 12.5 × 15	0.150	0.300	1020	▲16 × 20	0.13	0.26	750
220	221	10 × 20	0.147	0.294	885	16 × 25	0.10	0.20	890
070	071	▲10 × 25 16 × 15	0.130	0.260	1050	▲ 18 × 20	0.11	0.22	850
270	271 331		0.090 0.085	0.180	1410 1290	16 × 25	0.090	0.18	1080
330	331	12.5 × 20 12.5 × 25	0.065	0.170 0.140	1720	10 ^ 25	0.090	0.16	1080
390	391	12.5 ∧ 25 ▲ 18 × 15	0.070	0.172	1690	18 × 25	0.083	0.166	1260
		12.5 × 25	0.070	0.172	1720				
470	471	▲ 12.5 × 31.5	0.055	0.110	2090	16 × 31.5	0.076	0.152	1310
	7/1	* 16 × 20	0.059	0.118	1770	10 - 01.0	0.070	0.102	1010
560	561	* 10 · · 20	0.033	0.110	1770	18 × 31.5	0.068	0.136	1370
300	301	16 × 25	0.050	0.100	2160	10 - 01.0	0.000	0.100	1070
680	681	▲ 12.5 × 35.5	0.047	0.094	2270	16 × 35.5	0.064	0.128	1410
	00.	* 18 × 20	0.055	0.110	2290	.0 00.0	0.001	0.120	'''
		16 × 31.5	0.043	0.086	2670				
820	821	▲ 18 × 25	0.043	0.086	2590				
1005		16 × 31.5	0.043	0.086	2770				
1000	102	▲ 16 × 35.5	0.036	0.072	2770	18 × 40	0.047	0.094	1520
1200	122	18 × 31.5	0.032	0.064	2950		1		
1500	152	18 × 35.5	0.030	0.060	3100		1		
2200	222	18 × 40	0.028	0.056	3200				
							1	1	

▲: In this case, [6] will be put at 12th digit of type numbering system. : In this case, [3] will be put at 12th digit of type numbering system.

	V (Code)	160		200		250		315		350		400		450	
Cap. (µF)	Code	2C		2D		2E		2F		2V		2G		2W	
0.47	R47	6.3 × 11	12	6.3 × 11	12	6.3 × 11	12	8 × 11.5	11	8 × 11.5	11				
1	010	6.3 × 11	17	6.3 × 11	17	6.3 × 11	17	8 × 11.5	16	10 × 12.5	17	10 × 12.5	16	10 × 12.5	18
2.2	2R2	6.3 × 11	25	6.3 × 11	25	8 × 11.5	29	10 × 12.5	28	10 × 16	31	10 × 16	27	10 × 20	29
3.3	3R3	8 × 11.5	36	8 × 11.5	36	10 × 12.5	42	10 × 12.5	34	10 × 16	38	10 × 20	36	12.5 × 20	41
4.7	4R7	8 × 11.5	43	10 × 12.5	50	10 × 12.5	50	10 × 16	45	10 × 20	49	10 × 20	43	12.5 × 20	49
10	100	10 × 12.5	70	10 × 16	80	10 × 20	88	10 × 20	72	12.5 × 20	82	12.5 × 25	72	16 × 25	75
22	220	10 × 20	130	10 × 20	140	12.5 × 25	155	12.5 × 25	120	16 × 25	130	16 × 25	110	16 × 31.5	115
33	330	12.5 × 20	180	12.5 × 25	190	12.5 × 25	190	16 × 25	155	16 × 31.5	160	16 × 31.5	140	●18 × 35.5	145
47	470	12.5 × 25	220	12.5 × 25	220	16 × 25	230	16 × 35.5	190	●18 × 35.5	200	●18 × 35.5	170	20 × 40	175
100	101	16 × 25	330	16 × 31.5	335	●18 × 35.5	340	Δ18 × 40	285	20 × 40	290	22 × 50	350	25 × 50	350
220	221	●18 × 35.5	500	Δ18 × 40	515	20 × 40	525	22 × 50	540	25 × 50	550		İ		-
330	331	20 × 40	900	22 × 40	1100	22 × 50	1150		i i		!		l İ		
470	471	22 × 50	1200	22 × 50	1310	25 × 50	1350		İ		İ			Case size φD × L (mm)	<u>*</u> 1

^{%1} Rated ripple current (mArms) at 105°C 120Hz
Size

\$\text{Size } \phi 20 \times 31\$ is available for capacitors marked "

\$\times \text{" } \tilde{\text{" }} \tilde{