T-UP Series 85°C, 3000 hours

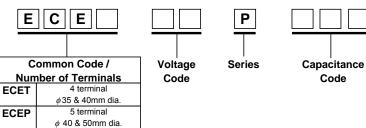
- 4 or 5 terminal mounting provides stability and keyed polarity
- Extended CV ratings
- Endurance rating of 3000 hours at 85°C
- Can vent construction



Rated Working Voltage:	16 ~ 250 VDC							350 ~ 500 VDC					
Operating Temperature:			-40 ~ +	-85°C				-25 ~ +85°C					
Nominal Capacitance:	1200 ~ 270000µF (±20% tolerance)							220 ~ 2700µF (±20% tolerance)					
Leakage Current:		$3\sqrt{CV}$ (µA) max. after 5 minutes; $C = Capacitance$ in µF, $V = WV$											
Ripple Current Multipliers:	Frequency(Hz):	50	60	100~120	500	1k	10k~	~ Ambient Temperature Factor*					
	16~100WV:	0.93	0.95	1.0	1.05	1.08	1.15	Temperature (°C):	85°C	70°C	60°C	≤45°C	
	16~100000.	0.95	0.90	1.0	1.05	1.00	1.15	Temperature (C).	00 0	10 0	00 0	10 0	
	160~500WV:		0.95	1.0	1.03	1.25	1.13	Multiplier:		1.3	1.4	1.5	

*Use of temperature ripple current multipliers may limit life to the hours specified for the maximum operating temperature.

Part Number System



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Diamete
Code

Α

Terminal Style (see pg.40)									
	Ratings:	Standard	Extended						
6.3mm le	ngth snap-in (standard):	Α	Х						
4.0mn	n length "short" terminal:	4	5						
4.0mm length s	traight pin with standoff:	Е	Y						

T-UP Standard Ratings

Cap.	Size (mm)	Max 85°C	R.C. (A _{rms})	Max 20°C	E.S.R. (Ω)	Panasonic	Cap.	Size (mm)	Max 85°C	R.C. (A _{rms})	Max 20°C	E.S.R. (Ω)	Panasonic
(μF)	DxL	120 Hz	10kHz~	120Hz	20kHz	Part Number	(μF)	DxL	120Hz	10kHz~	120Hz	20kHz	Part Number
		16 V	DC Working	, 20 VDC S	urge				35 VDC W	orking, 44 V	DC Surge ((continued)	
47000	35 x 40	7.47	8.59	0.021	0.019	ECET1CP473EA	33000	35 x 50	7.15	8.22	0.018	0.014	ECET1VP333EA
56000	40 x 40	9.05	10.41	0.022	0.021	ECET1CP563FA	39000	35 x 63	7.94	9.13	0.015	0.012	ECET1VP393EA
68000	35 x 50	9.05	10.41	0.018	0.017	ECET1CP683EA		40 x 50	7.98	9.18	0.017	0.014	ECET1VP393FA
82000	35 x 63	10.02	11.52	0.016	0.015	ECET1CP823EA	47000	35 x 80	9.53	10.96	0.014	0.011	ECET1VP473EA
	40 x 50	10.29	11.83	0.016	0.015	ECET1CP823FA		40 x 63	9.58	11.02	0.016	0.013	ECET1VP473FA
100000	35 x 80	11.00	12.65	0.015	0.014	ECET1CP104EA	56000	40 x 80	10.30	11.85	0.015	0.012	ECET1VP563FA
	40 x 63	11.36	13.06	0.018	0.017	ECET1CP104FA		50 x 50	10.94	12.58	0.015	0.012	ECEP1VP563HA
120000	35 x 105	12.81	14.73	0.014	0.013	ECET1CP124EA	68000	35 x 105	10.62	12.21	0.010	0.008	ECET1VP683EA
	40 x 80	12.42	14.28	0.017	0.016	ECET1CP124FA		50 x 63	11.93	13.72	0.013	0.011	ECEP1VP683HA
	50 x 50	13.17	15.15	0.014	0.013	ECEP1CP124HA	82000	40 x 105	12.02	13.82	0.012	0.009	ECET1VP823FA
150000	50 x 63	14.40	16.56	0.012	0.011	ECEP1CP154HA		50 x 80	13.06	15.02	0.012	0.010	ECEP1VP823HA
180000	40 x 105	14.85	17.08	0.013	0.012	ECET1CP184FA	100000	50 x 92	13.97	16.07	0.011	0.009	ECEP1VP104HA
	50 x 80	15.69	18.04	0.011	0.010	ECEP1CP184HA	120000	50 x 105	14.86	17.09	0.010	0.008	ECEP1VP124HA
220000	50 x 92	16.73	19.24	0.010	0.009	ECEP1CP224HA	50 VDC Working, 63 VDC Surge					Surge	
270000	50 x 105	17.79	20.46	0.009	0.008	ECEP1CP274HA	15000	35 x 40	6.44	7.41	0.028	0.021	ECET1HP153EA
		25 V	DC Working	, 32 VDC S	urge		18000	40 x 40	6.94	7.98	0.023	0.017	ECET1HP183FA
33000	35 x 40	6.84	7.87	0.019	0.015	ECET1EP333EA	22000	35 x 50	7.57	8.71	0.021	0.017	ECET1HP223EA
39000	40 x 40	8.00	9.20	0.020	0.018	ECET1EP393FA	27000	35 x 63	8.31	9.56	0.018	0.015	ECET1HP273EA
47000	35 x 50	8.00	9.20	0.014	0.012	ECET1EP473EA		40 x 50	8.12	9.34	0.018	0.015	ECET1HP273FA
56000	35 x 63	8.85	10.18	0.015	0.013	ECET1EP563EA	33000	35 x 80	9.23	10.61	0.015	0.012	ECET1HP333EA
	40 x 50	8.96	10.30	0.016	0.015	ECET1EP563FA		40 x 63	9.10	10.47	0.018	0.014	ECET1HP333FA
68000	35 x 80	10.43	11.99	0.013	0.011	ECET1EP683EA		50 x 50	10.48	12.05	0.018	0.014	ECEP1HP333HA
	40 x 63	10.25	11.79	0.017	0.015	ECET1EP683FA	39000	40 x 80	10.12	11.64	0.015	0.012	ECET1HP393FA
82000	50 x 50	12.29	14.13	0.016	0.015	ECEP1EP823HA	47000	35 x 105	10.27	11.81	0.014	0.011	ECET1HP473EA
100000	35 x 105	11.97	13.77	0.010	0.008	ECET1EP104EA		50 x 63	11.54	13.27	0.013	0.010	ECEP1HP473HA
	40 x 80	12.08	13.89	0.012	0.011	ECET1EP104FA	56000	40 x 105	11.47	13.19	0.012	0.009	ECET1HP563FA
	50 x 63	13.45	15.47	0.014	0.013	ECEP1EP104HA		50 x 80	12.46	14.33	0.012	0.009	ECEP1HP563HA
120000	50 x 80	15.29	17.58	0.012	0.011	ECEP1EP124HA	68000	50 x 92	13.17	15.15	0.011	0.009	ECEP1HP683HA
150000	40 x 105	14.07	16.18	0.011	0.010	ECET1EP154FA	82000	50 x 105	13.87	15.95	0.011	0.008	ECEP1HP823HA
	50 x 92	16.01	18.41	0.011	0.010	ECEP1EP154HA			63 V	DC Working	j, 79 VDC S	Surge	
180000	50 x 105	16.89	19.42	0.010	0.009	ECEP1EP184HA	10000	35 x 40	6.52	7.50	0.041	0.033	ECET1JP103EA
		35 V	DC Working	i, 44 VDC S	urge		12000	35 x 50	7.15	8.22	0.035	0.028	ECET1JP123EA
22000	35 x 40	6.10	7.02	0.026	0.020	ECET1VP223EA		40 x 40	7.15	8.22	0.035	0.028	ECET1JP123FA
27000	40 x 40	6.84	7.87	0.021	0.017	ECET1VP273FA	15000	35 x 63	7.71	8.87	0.028	0.022	ECET1JP153EA

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.

T-UP Standard Ratings (continued)

μp p1 10 1000 1000 2000<		Size (mm)			-		Panasonic	Con	Sizo (mm)	May 85°C		May 20%		Panasonic
0 0	Cap.					1		Cap.	Size (mm)		1			
15000 40 × 160 750 8.66 0.023 0.007 ECTUPHSIA 1000 8.60 12.11 0.021 0.012 ECTUPHSIA 1000 8.6 9.40 1.04 0.022 0.021 ECTUPHSIA 7500 8.0 1.21 1.001 0.022 0.017 ECEPPAPIA 100 9.700 1.86 1.24 0.018 0.015 ECEPPAPIA 1000 9.700 1.84 0.016 ECEPPAPIA 1000 1.107 1.132 0.142 0.016 0.017 ECEPPAPIA 1000 1.107 1.132 0.015 0.015 ECEPPAPIA 1000 3.5 4.66 0.016 0.018 ECEPPAPIA 1000 1.107 1.132 0.023 0.023 0.025 ECEPPAPIA 1000 3.5 4.46 6.39 0.111 0.055 ECEPPAPIA 1000 3.5 5.6 0.46 0.026 0.011 0.025 ECEPPAPIA 10000 5.65	(μι)	DXL	1				Fart Number	(µi)				1	1	
18000 38 × 80 9.41 19.82 0.028 <t< th=""><th></th><th>1</th><th></th><th>-</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>-</th><th>· ·</th><th></th></t<>		1		-								-	· ·	
u u								6800						ECET2DP682FA
27000 58 × 105 10.38 11.54 0.016 0.027 ECETIVPZICA ECETIVPZICA ECETIVPZICA ECETIVPZICA ECETIVPZICA ECETIVPZICA ECETIVPZICA	18000							7500						ECEP2DP682HA
bit bit <td>27000</td> <td></td>	27000													
So : 60 10:8 11:70 13:2 0:80 10:70	27000							0200						ECEP2DP822HA
13000 40 140 14.52 0.015 0.012 CECT MP335A 27003 05 14.57 14.20 0.015 0.012 CECT MP335A 27003 05 14.57 0.015 0.016<								10000						ECEP2DP103HA
17000 60 - 80 12.77 14.70 60.10 CEPEPIPF3HA 18000 56 - 10 13.84 15.84 6.12 0.02 0.02 CEPEPIPF3HA 18000 56 - 10 10.70 0.70 0.70 <	33000													
51000 0 1.52 1.5.4 0.012 0.010 0.012 0.010 0.012 0.010 0.012 0.010 0.012 0.010 0.012 0.010 0.010 0.013 0.088 Cettraperson 0.00 0.113.0.0 0.02 0.012 0.010 0.013 0.088 0.010 0.055 Cettraperson 0.00 0.113.0.0 0.020 ECHTMPROZEA 200 0.110 0.055 Cettraperson 0.00 0.152 0.35 0.070 0.000 0.045 ECHTMPROZEA 0.00 0.55 0.53 7.44 0.033 0.022 CettMPROZEA 200 0.63 8.1 0.074 0.037 Cettraperson 0.00 0.52 7.24 0.031 0.022 CettMPROZEA 200 0.63 0.074 0.037 Cettraperson 0.00 0.158 0.011 0.021 CettMPROZEA 200 0.010 0.000 0.000 0.000 0.000 0.000 Cet		50 x 63	11.67	13.42	0.017	0.013	ECEP1JP333HA	1200	35 x 40	3.32	4.65	0.166	0.083	ECET2EP122EA
6500 60 1.100 15.0 1.100 5.5 4.48 6.29 0.111 0.055 CECTTEPT 8800 55.40 5.55 6.70 0.038 0.023 CECTTEPT 2.200 35.50 6.41 0.65 CECTTEPT 1200 55.50 6.70 0.038 0.022 CECTTEPT 0.006 0.045 CECTTEPT 1200 55.50 6.92 0.71 0.038 0.022 CECTTEPT 0.006 0.000 0.045 CECTTEPT 1200 55.50 6.92 7.70 0.028 0.027 0.024 0.071 CECTTEPT 1200 55.50 6.92 7.70 0.038 0.027 0.024 0.071 CECTTEPT 1200 55.50 6.92 7.70 0.938 0.027 0.027 0.027 0.027 0.027 0.027 0.027 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0	47000	50 x 80	12.78			0.010	ECEP1JP473HA	1500	35 x 50	4.04	5.66	0.133	0.066	ECET2EP152EA
Image: Constraint of the state of														ECET2EP152FA
6800 55 + 40 51.6 53.8 0.40 0.035 ECETIMP822A 6500 55 + 50 58.8 6.70 0.038 0.029 ECETIMP822A 6000 55 + 60 3.8 6.70 0.038 0.029 ECETIMP822A 1000 35 + 60 4.94 6.82 0.980 0.046 ECETIZEP 1000 35 + 60 4.94 6.82 0.980 0.047 ECETIZEP 1000 35 + 60 4.94 6.82 0.980 0.037 ECETIZEP 1000 40 + 60 7.29 1.011 0.002 0.024 0.021 ECETIMP135A 1000 40 + 60 1.038 1.032 0.015 0.011 ECETIMP135A 12000 40 + 60 1.038 0.015 0.011 ECETIMP135A 12000 40 + 105 1.038 0.015 0.012 ECETIMP135A 12000 40 + 105 1.038 0.015 ECETIMP135A 20000 40 + 105 1.039	56000	50 x 105					ECEP1JP563HA	1800						ECET2EP182EA
EXCUD 55 x 50 5.83 6.70 0.038 0.028 ECCTIMPRIZEA (2000) 53 x 60 4.94 6.52 0.060 0.046 ECCTIMPRIZEA (2000) 35 x 63 0.56 7.44 0.033 0.025 ECCTIMPRIZEA (2000) 55 x 60 56 x 60 56 x 70 0.037 ECCTIMPRIZEA (2000) 55 x 60 56 x 70 0.044 ECCTIMPRIZEA (2000) 55 x 60 56 x 70 0.044 ECCTIMPRIZEA (2000) 55 x 60 6.67 7.68 0.037 ECCTIMPRIZEA (2000) 55 x 60 6.77 0.44 6.02 0.000 ECCTIMPRIZEA (2000) 55 x 60 6.77 0.44 6.027 0.037 ECCTIMPRIZEA (2000) 50 x 60 6.77 0.44 0.037 0.037 ECCTIMPRIZEA (2000) 50 x 60 11.35 10.30 0.017 ECCTIMPRIZEA (2000) 50 x 60 11.35 10.30 0.017 ECCTIMPRIZEA (2000) 50 x 60 11.35 10.30 0.012 ECCTIMPRIZEA (2000) 50 x 60 0.026 0.026 ECCTIMPRIZEA (2000) 50 x 60 0.030 0.027 ECCTIMPRIZEA (6900	2E v 40					ECET4KB692EA	2200						ECET2EP182FA
40.40 6.83 6.70 0.038 0.028 ECETTMPR2FA Display 40.153 44.4 6.92 0.000 0.045 ECETTAPP12FA Display 40.150 6.38 7.54 0.033 0.025 ECETTAPP12FA Display 40.153 5.81 6.13 0.074 0.037 ECETTAPP1 Display 40.163 7.24 8.38 0.028 0.028 0.028 0.028 0.028 0.038 0.223 10.11 0.026 0.038 ECETTAPP12FA 400.163 0.16 ECETTAPP12FA 0.016 0.016 FCETTAPP12FA 0.016 0.028 0.028 ECETTAPP12FA 2000 0.021 0.021 0.021 ECETTAPP12FA 0.016 0.028 0.028 0.028 0.028 ECETTAPP12FA 2000 0.016 1.33 0.016 0.021 ECETTAPP12FA 0.016 0.028 0.018 ECETTAPP12FA 2000 0.016 1.43 1.044 0.016 0.028 0.018 ECETTAPP12FA 2000								2200						ECET2EP222EA
10000 5 * 63 6.8 7.44 0.033 0.025 ECCTIMPIOSEA 2700 35 * 60 6.96 7.74 0.037 ECCTIMPIOSEA 12000 55 * 60 6.96 7.74 6.038 0.028 0.027 ECCTIMPIOSEA 50 * 6 6.77 6.48 0.037 ECCTIMPIOSEA 15000 60 * 60 7.26 6.38 0.024 0.017 ECCTIMPIOSEA 50 * 60 6.77 6.48 0.026 0.006 ECCTIMPIOSEA 2000 60 * 105 11.36 10.024 0.017 ECCTIMPIOSEA 300 40 * 60 7.78 10.01 0.026 ECCTIMPIOSEA 2000 61 * 105 11.36 10.015 0.012 ECCTIMPIOSEA 40 * 60 7.78 10.01 0.026 ECCTIMPIOSEA 2000 61 * 125 11.35 0.016 0.012 ECCTIMPIOSEA 400 40 * 60 13.4 10.024 ECCTIMPIOSEA 3000 61 * 12.5 11.4 0.016 ECCTIMPIOSEA 400 <	0200													ECET2EP222FA
12000 35 : 60 6.72 6.83 0.028 0.021 ECETIMP132A 15000 40 : 80 8.38 10.27 0.024 0.031 ECETIMP132A 22000 50 : 105 0.80 11.08 10.27 0.024 0.017 ECETIMP132A 22000 50 : 105 11.08 1.27 0.010 0.017 ECETIMP132A 22000 50 : 105 12.33 11.08 0.015 0.014 ECETIMP23AA 3300 35 : 105 9.80 0.015 0.024 ECETIZEP 3300 50 : 60 11.08 1.035 0.016 ECETIZEP 3300 50 : 60 1.134 0.015 0.016 ECETIZEP 3300 50 : 60 1.233 1.148 0.015 0.016 ECETIZEP 3300 50 : 729 0.409 0.037 ECETIZEP 6000 50 : 60 0.600 ECETIZEP 3300 51 : 60 1.52 0.165 1.241 1.416 0.260 <td< td=""><td>10000</td><td></td><td></td><td></td><td></td><td></td><td></td><td>2700</td><td></td><td></td><td></td><td></td><td></td><td>ECET2EP272EA</td></td<>	10000							2700						ECET2EP272EA
40 : 63 7.20 8.38 0.028 0.021 ECETIMPISTA ECEPTER' 500 d0 : 50 700 900 0.060 0.030 ECETIMPISTA 500 d0 : 50 18000 50 : 50 11.50 0.023 0.018 ECETIMPISTA 500 d0 : 50 0.010 ECETIMPISTA 500 d0 : 50 0.011		40 x 50	6.56	7.54	0.033	0.025	ECET1KP103FA		40 x 63	5.81	8.13	0.074	0.037	ECET2EP272FX
15000 40 : 80 83 10.27 0.024 0.017 CECTIFP/157AA 18000 50 : 90 10.00 11.36 0.017 CECTIFP/157AA 22000 58 : 105 9.86 11.36 0.016 0.014 ECETIFP/157AA 50 : 63 11.38 1.30 0.016 0.014 ECETIFP/157AA 50 : 63 11.33 1.30 0.016 0.014 ECETIFP/157AA 50 : 80 12.33 1.418 0.016 0.012 ECETIFP/157AA 50 : 80 12.33 1.43 0.016 0.014 ECETIFP/157AA 50 : 80 1.434 1.44 0.010 ECETIFP/157AA 50 : 80 0.51 1.33 0.042 0.021 ECETIFF/157AA 500 : 80 1.434 1.44 0.010 ECETIFF/157AA 500 0.016 ECETIFF/157AA 500 : 80 1.434 1.44 0.016 ECETIFF/157AA 500 0.017 ECETIFF/157AA 500 : 50 6.81 0.348 <	12000	35 x 80					ECET1KP123EA							ECEP2EP272HA
18000 50 · c 0 10.00 11.30 0.023 0.07 ECEPTIPE'SAM 2000 35 · c 05 11.36 11.34 0.016 0.011 ECETTAPPC 200 50 · c 05 11.36 11.34 0.016 0.011 ECETTAPPC 200 50 · c 05 11.35 10.30 0.011 ECETTAPPC 40 · c 05 13.37 10.40 0.016 ECETTAPPC 30000 50 · c 05 13.37 10.40 0.016 ECETTAPPC 30000 50 · c 05 14.34 10.48 0.016 ECETTAPPC 4700 30 · 40 51.3 5.00 0.026 ECETTAPPC 4700 30 · 40 51.3 5.00 0.016 ECETTAPPC 400 · 50 5.00 5.00 50 · 60 14.34 0.026 ECETTAPPC 400 · 50 5.20 7.74 10.00 0.030 ECETTAPPC 600 50.74 14.00 0.015 ECETTAPPC 400 · 50 7.74								3300						ECET2EP332FA
22000 35 x 105 9.88 11.34 0.015 0.014 ECETIPEP2EA 27000 40 x 105 11.38 13.05 0.015 0.012 ECETIPEP2EA 33000 50 x 82 13.37 15.38 0.014 0.011 ECETIPEP2EA 33000 50 x 82 13.37 15.38 0.014 0.010 ECETIPEP2EA 33000 50 x 83 1.34 1.364 0.013 0.010 ECETIPEP2EA 30000 50 x 13.4 40 x 50 53 0.017 0.049 ECETIPEP2EA 5000 51 x 550 0.071 0.049 ECETIPAP3EA 750 0.152 0.020 0.016 ECEP2EPE 5000 51 x 550 0.071 0.049 ECETIPAP3EA 750 0.150 0.028 0.016 ECEP2EPE 5000 51 x 50 0.071 0.049 ECETIPAP3EA 750 0.150 0.028 0.016 ECEP2EP4 6000 51 x 50 0.071 ECETIPAP3EA 750 0														ECEP2EP332HX
So x 63 11.08 12.74 0.019 0.014 ECCEPTRP23PAA 2700 40 x 105 11.33 11.30 0.015 0.028 ECCT2EPT 3300 50 x 80 12.33 14.18 0.015 0.012 ECCEPTEPT 33000 50 x 105 14.34 16.40 0.013 0.010 ECCEPTEPT 33000 50 x 105 14.34 16.40 0.013 0.010 ECCEPTEPT 30000 50 x 105 14.34 16.40 0.018 ECCEPTEPT 4700 35 x 40 5.51 5.50 0.027 0.048 ECCEPTEPT 6000 35 x 50 6.60 7.59 0.049 0.037 ECCT2APP32EA 6000 35 x 50 7.74 8.37 0.049 0.030 ECCET2APP32EA 6000 35 x 50 7.74 8.30 0.033 0.025 ECCET2APP32EA 6000 35 x 105 8.57 9.86 0.028 0.021 ECCET2APP32EA 10000								2000						ECEP2EP332HA
27000 40 x 105 11 33 13 35 13 35 13 35 13 35 13 35 13 35 13 35 13 37 13 38 0.012 CEPTRP27HA 33000 59 x 92 13 37 15 38 0.014 0.010 ECEPTRP33HA 9900 59 x 40 51 33 0.042 0.021 ECEPTRP1 1700 37 x 40 51 3 500 0.071 0.049 ECET2AP72EA 5900 40 x 40 573 6.01 0.059 0.044 ECET2AP7472A 5900 35 x 63 7.05 8.11 0.040 0.030 ECET2AP742FA 700 35 x 40 7.74 8.90 0.033 0.025 ECET2AP402FA 10000 35 x 80 7.74 8.90 0.020 CET2AP402FA 0.033 0.026 ECET2AP402FA 10000 35 x 80 7.74 8.90 0.020 CET2AP402FA 0.020 0.020 ECET2AP402FA 10000 50 x 63 10.07 1.154 0.022	22000							2900						ECET2EP392EA ECET2EP392FA
50 x 80 12.33 14.18 0.015 0.012 ECEPTR/P33HA 33000 50 x 105 14.34 16.49 0.013 0.010 ECEPTR/P33HA 13000 50 x 105 14.34 16.49 0.013 0.010 ECEPTR/P33HA 1400 700 50 x 40 5.13 5.00 0.071 0.049 0.027 ECEPTR/P33HA 500 40 x 40 5.75 6.61 0.050 0.044 ECETAP472EA 500 40 x 50 7.28 8.37 0.040 0.007 ECETAP4762EA 700 50 x 100 12.58 17.58 0.028 0.015 ECETAP4702A 1000 35 x 60 6.57 9.68 0.028 0.021 ECETAP4703A 1000 35 x 105 8.57 9.66 0.028 0.021 ECETAP4703FA 11000 35 x 105 8.57 9.66 0.028 0.021 ECETAP4703FA 11000 55 x 105 8.57 9.66 0.028 0.027	27000													ECET2EP392HA
33000 50 × 82 13.37 15.38 0.010 ECEPERPR33HA 39000 50 × 82 11.37 16.49 0.010 ECEPTAPR33HA 7000 35 × 40 51.3 50.9 0.071 0.049 ECEPTAPR33HA 6000 50 × 20 10.37 6.61 0.059 0.044 ECEPTAPR32HA 6000 40 × 40 5.75 6.61 0.059 0.044 ECETAPR47ZB 6000 35 × 60 6.07 7.99 0.049 0.030 ECETAPR47ZB 6000 35 × 60 7.66 6.11 0.040 0.030 ECETAPR47ZB 40 × 60 7.88 6.37 0.040 0.030 ECETAPR47ZB 10000 35 × 80 7.74 6.90 0.021 ECETAPAP17ZB 10000 50 × 63 9.85 0.022 ECETAP4712BA 10.00 3.82 2.244 0.112 ECETAP1472BA 10000 50 × 63 10.071 11.68 0.022 CO177 ECETAP4712BA 1								4700						ECET2EP472FA
Image: 100 VICE Working, 128 VICE Surge 00.02 10.03 15.12 0.0.30 0.0.31 0.02 10.03 15.12 0.0.30 0.0.31 0.02 10.03 10.51 12.18 17.02 0.0.32 0.0.31 0.028 0.0.31 0.028 0.0.31 0.028 0.0.31 0.028 0.0.31 0.028 0.0.31 0.028 0.0.31 0.028 0.028 0.0.38 0.175 0.0.38 0.175 0.0.38 0.015 ECET2APSTAR 40 x 50 7.74 9.37 0.400 0.033 0.025 ECET2APSTAR 40 x 50 3.88 0.175 ECET2AP 10000 35 x 60 7.74 9.00 0.033 0.025 ECET2APSTAR 40 x 50 3.80 5.32 0.240 0.112 ECET2APSTAR 12000 35 x 105 8.86 0.028 0.022 ECET2APSTAR 40 x 50 3.80 5.32 0.240 0.112 ECET2AP 12000 35 x 105 7.75 8.11 0.135 ECET2APSTAR	33000													ECEP2EP472HA
4700 35 x 40 5:3 5:00 0.071 0.049 ECET2AP472EA 8800 0.0 x 105 12:6 17:80 0.030 0.015 ECEP22P1 8600 35 x 50 6.60 7.99 0.049 0.037 ECET2AP452EA 7500 50 VOC Working, 400 VOC Surge 8200 35 x 50 8.67 7.98 0.040 0.030 ECET2AP452EA 470 35 x 40 2.40 336 0.386 0.175 ECET2VP3 10000 35 x 80 7.77 8.97 0.400 0.033 CCET2AP132FA 680 35 x 40 2.96 4.14 0.386 0.165 ECET2VP3 10000 35 x 105 8.87 9.86 0.028 0.021 ECET2AP132FA 600 x 50 3.80 5.32 0.249 0.112 ECET2VP3 12000 35 x 105 8.57 9.86 0.028 0.021 ECET2AP132FA 1000 35 x 10 1.10 1.25 ECET2AP132FA 12000 50 x 80 1.10 1.156	39000	50 x 105					ECEP1KP393HA	5600	50 x 80	14.34	20.08	0.036	0.018	ECEP2EP562HX
5600 40 40 5.75 6.61 0.059 0.044 ECET2APESEA 7500 50.117.58 0.028 0.014 ECER2APESEA 8800 35 5.5 6.60 7.59 0.044 0.039 ECET2APESEA 700 35 ± 60 2.96 0.16 ECET2APESEA 40 50 7.28 8.37 0.040 0.033 CECT2APESEA 470 35 ± 60 2.96 4.14 0.366 0.165 ECET2APESEA 1000 35 ± 63 7.87 9.80 0.033 0.025 ECET2APESEA 40.40 5.32 0.249 0.112 ECET2APESEA 12000 35 ± 63 7.87 9.86 0.022 0.017 ECET2APESEA 40.43 4.80 5.32 0.249 0.112 ECET2APESEA 12000 35 ± 105 8.85 9.85 0.022 0.017 ECET2APESEA 40.43 4.42 6.19 0.207 0.083 ECET2APESEA 1500 10.12 11.16 0.022<		1				-								ECEP2EP562HA
6800 35 x 50 6.80 7.59 0.049 0.037 ECCT2APESEA 35 x 40 2.40 36 x 40 2.40 8200 35 x 50 7.72 8.37 0.040 0.030 ECCT2APESEA 470 35 x 40 2.40 336 0.136 0.036 DECT2APESEA 10000 35 x 60 7.47 8.67 0.033 0.025 ECCT2APIOSFA 680 35 x 80 5.32 0.249 0.112 ECCT2APIOSFA 12000 35 x 105 8.57 9.87 0.033 0.025 ECCT2APIOSFA 1000 55 x 80 4.42 6.18 0.207 0.093 ECCT2APISFA 12000 35 x 105 5.18 7.25 0.207 0.093 ECCT2APISFA 500 x 63 6.01 8.41 0.166 0.075 ECCT2APISFA 12000 50 x 63 10.07 11.86 0.022 0.011 ECCF2APISFA 1000 5.05 5.18 7.28 0.207 0.038 ECCT2APISFA 12000 50 x														ECEP2EP682HA
8200 35 + 63 7 05 8.11 0.040 0.030 ECET2AP82ZA 470 35 × 60 2.40 3.38 0.386 0.175 ECET2AP82A 10000 35 × 80 7.74 8.90 0.033 0.025 ECET2AP103FA 600 35 × 63 2.40 3.38 0.386 0.165 ECET2AP103FA 12000 35 × 80 7.97 9.17 0.033 0.025 ECET2AP103FA 40 × 60 3.80 5.32 0.244 0.112 ECET2AP1 12000 35 × 105 8.57 9.86 0.028 0.021 ECET2AP132FA 40 × 63 4.42 6.19 0.207 0.003 ECET2AP1 1500 40 × 105 10.12 11.64 0.022 0.017 ECET2AP135FA 50 × 83 6.18 7.29 0.207 0.003 ECET2AP1 12000 50 × 105 1.441 0.016 ECET2AP135FA 60 × 83 8.19 0.138 0.062 ECET2AP1 12000 50 × 105 1.441 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7500</td><td>50 x 105</td><td></td><td></td><td></td><td></td><td>ECEP2EP752HA</td></td<>								7500	50 x 105					ECEP2EP752HA
								470	35 x 40		-		_	ECET2VP471EA
1000 40 × 60 7.74 8.90 0.033 0.025 ECET2AP103EA 1000 40 × 60 7.97 8.90 0.033 0.025 ECET2AP103EA 100 Å x 53 3.80 5.32 0.249 0.112 ECET2AP1 1200 35 x 105 8.57 9.86 0.028 0.021 ECET2AP103EA 40 x 50 3.80 5.32 0.249 0.112 ECET2AP1 40 x 60 8.66 0.88 0.028 0.021 ECET2AP132EA 40 x 63 4.42 6.19 0.207 0.093 ECET2AP1 60 x 63 10.07 11.58 0.022 0.017 ECEP2AP153EA 150 5 x 63 6.18 7.25 0.207 0.008 ECET2AP1 12000 50 x 105 11.00 12.53 1.441 0.014 ECEP2AP135BA 150 5 x 63 6.18 7.25 0.207 0.008 ECET2AP1 2000 50 x 105 11.00 12.53 1.441 0.014 0.015 ECET2AP1 40 x	0200													ECET2VP681EA
60 50 8.82 10.14 0.033 0.025 ECEP2AP103HA 40 x 50 3.80 5.32 0.248 0.112 ECET2AP132FA 12000 40 x 105 0.655 9.95 0.028 0.021 ECET2AP132FA 1200 35 x 60 4.42 6.19 0.207 0.093 ECET2AP1 15000 40 x 105 10.12 11.64 0.022 0.017 ECEP2AP153FA 1500 50 x 63 6.01 8.11 0.168 0.008 ECEP2AP1 18000 50 x 80 11.00 12.55 0.016 0.011 ECEP2AP13HA 1800 35 x 105 5.79 8.11 0.138 0.062 ECET2AP1 2200 50 x 105 12.53 14.41 0.014 0.010 ECEP2AP23HA 150 x 80 6.89 9.65 0.113 0.062 ECET2AP1 2200 35 x 60 5.45 7.63 0.060 0.044 ECET2CP322FA 200 50 x 80 9.67 0.113 0.051 ECET2AP1 200<	10000													ECET2VP681FA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		40 x 63	7.97	9.17	0.033	0.025	ECET2AP103FA	1000	35 x 63	3.80	5.32	0.249	0.112	ECET2VP102EA
		50 x 50	8.82	10.14	0.033	0.025	ECEP2AP103HA		40 x 50	3.80	5.32	0.249	0.112	ECET2VP102FA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	12000							1200						ECET2VP122EA
	45000													ECET2VP122FA
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	18000													ECEP2VP152HA ECET2VP182EA
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			12.53	14.41	0.014	0.010	ECEP2AP273HA							ECEP2VP182HA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, 200 VDC	Surge		2200	40 x 105	6.91	9.67	0.113	0.051	ECET2VP222FA
40 x 40 5.45 7.63 0.080 0.044 ECET2CP272FA 3300 35 x 63 6.29 8.81 0.065 0.036 ECET2CP332FA 40 x 60 6.29 8.81 0.055 0.030 ECET2CP332FA 3900 35 x 80 7.27 10.18 0.055 0.030 ECET2CP392FA 680 40 x 80 8.32 11.65 0.038 0.021 ECET2CP392FA 500 40 x 80 8.32 11.55 0.038 0.021 ECET2CP302FA 680 40 x 50 3.38 4.73 0.222 0.078 ECET2OP32FA 6800 35 x 63 8.25 11.55 0.038 0.021 ECET2CP562FA 6800 35 x 80 3.42 4.97 0.199 0.080 ECET2OP 10000 40 x 105 9.86 13.80 0.022 0.012 ECET2OP103FA 100 35 x 80 4.16 5.82 0.199 0.080 ECET2OP1 12000 50 x 105 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>ECEP2VP222HA</td></t<>														ECEP2VP222HA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2700							2700	50 x 105					ECEP2VP272HA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2200							470	2E v 4E				-	ECET2CD474EV
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	3300													ECET2GP561EA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	3900							500						ECET2GP561FA
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	5600	40 x 80	8.32	11.65	0.038	0.021	ECET2CP562FA	820	35 x 63	3.55	4.97	0.222	0.078	ECET2GP821EA
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40 x 40 4.92 6.89 0.098 0.054 ECET2DP222FA 50 x 63 6.12 8.57 0.133 0.053 ECEP2P2 2700 35 x 63 5.50 7.70 0.080 0.044 ECET2DP27EA 50 x 80 6.47 9.06 0.133 0.053 ECEP2GP 3300 35 x 80 6.44 9.02 0.065 0.036 ECET2DP32EA 50 x 80 7.09 9.93 0.111 0.044 ECEP2GP 3300 35 x 80 6.44 9.02 0.065 0.036 ECET2DP332EA 50 x 80 7.09 9.93 0.111 0.044 ECEP2GP 40 x 63 6.32 8.85 0.055 0.030 ECET2DP332FA 50 x 92 7.35 10.29 0.111 0.044 ECEP2GP 3900 35 x 80 6.60 9.24 0.055 0.030 ECET2DP392FA 50 x 105 8.43 11.38 0.090 0.036 ECEP2GP2 50 x 63 9.32 11.51 0.055 0.030								1500	35 x 105	5.44	7.62			ECET2GP152EA
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40 x 50 5.41 7.57 0.080 0.044 ECET2DP272FA 1800 40 x 105 6.53 9.14 0.101 0.035 ECET2DP332FA 3300 35 x 80 6.44 9.02 0.065 0.036 ECET2DP332EA 50 x 80 7.09 9.93 0.111 0.044 ECEP2GP332FA 3900 35 x 80 6.60 9.24 0.055 0.030 ECET2DP332FA 50 x 92 7.35 10.29 0.111 0.044 ECEP2GP332FA 40 x 63 6.81 9.53 0.055 0.030 ECET2DP392FA 2200 50 x 92 8.13 11.38 0.090 0.036 ECEP2GP32FA 50 x 50 8.22 11.51 0.055 0.030 ECET2DP392FX 50 x 105 8.43 11.80 0.090 0.036 ECEP2GP32FA 4700 40 x 80 8.38 11.73 0.046 0.025 ECET2DP472FA 2700 50 x 105 9.34 13.08 0.073 0.025 ECEP2DP472FA 50 x 63 9.32<	0700													ECEP2GP152HX
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40 x 63 6.32 8.85 0.065 0.036 ECET2DP332FA 50 x 92 7.35 10.29 0.111 0.044 ECEP2P3P 3900 35 x 80 6.60 9.24 0.055 0.030 ECET2DP392EA 2200 50 x 92 8.13 11.38 0.090 0.036 ECEP2P392FA 40 x 63 6.81 9.53 0.055 0.030 ECET2DP392FA 50 x 105 8.43 11.80 0.090 0.036 ECEP2P392FA 50 x 50 8.22 11.51 0.055 0.030 ECET2DP392FA 2700 50 x 105 8.43 11.80 0.090 0.036 ECEP2P392FA 4700 40 x 80 8.38 11.73 0.046 0.025 ECEP2DP472FA 2700 50 x 105 9.34 13.08 0.073 0.025 ECEP2DP392FA 500 x 63 9.32 13.05 0.046 0.025 ECEP2DP472FA 330 35 x 40 2.01 2.81 0.553 0.249 ECET2DP472FA 56000 35 x 105 </td <td>3300</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1800</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ECET2GP182FA ECEP2GP182HX</td>	3300							1800						ECET2GP182FA ECEP2GP182HX
3900 35 x 80 6.60 9.24 0.055 0.030 ECET2DP392EA 40 x 63 6.81 9.53 0.055 0.030 ECET2DP392FX 50 x 105 8.43 11.38 0.090 0.036 ECEP2P2P 50 x 50 8.22 11.51 0.055 0.030 ECET2DP392FX 2700 50 x 105 9.34 13.08 0.073 0.025 ECEP2DP32PA 4700 40 x 80 8.38 11.73 0.046 0.025 ECET2DP472FA 450 VDC Working, 500 VDC Surge ECET2DP472FA 50 x 63 9.32 13.05 0.046 0.025 ECET2DP562EA 470 35 x 50 2.53 3.54 0.423 0.233 ECET2WP4562EA	0000													ECEP2GP182HA
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50 x 63 9.32 13.05 0.046 0.025 ECEP2DP472HA 330 35 x 40 2.01 2.81 0.553 0.249 ECET2WP3 5600 35 x 105 8.90 12.46 0.038 0.021 ECET2DP562EA 470 35 x 50 2.53 3.54 0.423 0.233 ECET2WP4							ECEP2DP392HA	2700	50 x 105					ECEP2GP272HA
5600 35 x 105 8.90 12.46 0.038 0.021 ECET2DP562EA 470 35 x 50 2.53 3.54 0.423 0.233 ECET2WP4	4700										-		_	
	FOOD													ECET2WP331EA
	0000							470						ECET2WP471EA ECET2WP471FA
	L	30 x 03	0.01	10.40	0.000	0.021	LULI ZUFJUZNA	J	-	2.00	0.04	0.420	0.233	LUCIZMENTITA

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.

T-UP Standard Ratings (continued)

Cap.	Size (mm)	Panasonic											
(μF)	DxL	120 Hz	10kHz~	120Hz 20kHz		Part Number							
	400 VDC Working, 450 VDC Surge (continued)												
560	35 x 63	2.90	4.06	0.355	0.195	ECET2WP561EA							
680	35 x 80	3.17	4.44	0.293	0.161	ECET2WP681EA							
	40 x 50	3.15	4.41	0.293	0.161	ECET2WP681FA							
820	35 x 80	3.78	5.29	0.243	0.133	ECET2WP821EA							
	40 x 63	3.70	5.18	0.243	0.133	ECET2WP821FA							
	50 x 50	4.31	6.03	0.263	0.145	ECEP2WP821HA							
1000	40 x 80	4.21	5.89	0.216	0.119	ECET2WP102FA							
	50 x 63	4.96	6.94	0.216	0.119	ECEP2WP102HA							
1200	35 x 105	4.80	6.72	0.166	0.091	ECET2WP122EA							
	40 x 80	4.84	6.78	0.166	0.091	ECET2WP122FA							
	50 x 63	5.43	7.60	0.180	0.099	ECEP2WP122HX							
	50 x 80	5.71	7.99	0.180	0.099	ECEP2WP122HA							
1500	40 x 105	5.81	8.13	0.133	0.073	ECET2WP152FA							
	50 x 80	6.15	8.61	0.144	0.079	ECEP2WP152HX							
	50 x 92	6.55	9.17	0.144	0.079	ECEP2WP152HA							
1800	50 x 92	7.02	9.83	0.120	0.066	ECEP2WP182HX							
	50 x 105	7.36	10.30	0.120	0.066	ECEP2WP182HA							
		500 V	DC Working	, 550 VDC	Surge								
270	35 x 40	1.76	2.46	0.614	0.276	ECET2HP271EA							
330	40 x 40	2.16	3.02	0.502	0.276	ECET2HP331FA							
390	35 x 50	2.22	3.11	0.425	0.234	ECET2HP391EA							
470	35 x 63	2.58	3.61	0.353	0.194	ECET2HP471EA							
	40 x 50	2.70	3.78	0.353	0.194	ECET2HP471FA							
560	40 x 63	3.11	4.35	0.326	0.179	ECET2HP561FA							
	50 x 50	3.52	4.93	0.355	0.195	ECEP2HP561HA							
680	35 x 80	3.21	4.49	0.244	0.134	ECET2HP681EA							
	50 x 50	3.88	5.43	0.293	0.161	ECEP2HP681HX							
	50 x 63	4.07	5.70	0.293	0.161	ECEP2HP681HA							
820	35 x 105	3.97	5.56	0.202	0.111	ECET2HP821EA							
	40 x 80	3.88	5.43	0.222	0.122	ECET2HP821FA							
	50 x 63	4.47	6.26	0.222	0.122	ECEP2HP821HA							
1000	50 x 80	5.05	7.07	0.199	0.109	ECEP2HP102HA							
1200	40 x 105	5.90	8.26	0.152	0.084	ECET2HP122FA							
	50 x 80	5.35	7.49	0.166	0.091	ECEP2HP122HX							
	50 x 92	5.74	8.04	0.166	0.091	ECEP2HP122HA							
1500	50 x 105	6.65	9.31	0.144	0.079	ECEP2HP152HA							