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√CV (µA) max. after 5 minutes; *C = Capacitance in µF, V = WV*	

Ripple Current Multipliers:

Frequency(Hz):	50	60	100~120	500	1k	10k~
16~100WV:	0.93	0.95	1.0	1.05	1.08	1.15
160~500WV:	0.75	0.8	1.0	1.2	1.25	1.4

Ambient Temperature Factor*				
Temperature (°C):	85°C	70°C	60°C	≤45°C
Multiplier:	1.0	1.3	1.4	1.5

Endurance: 3000 hours at +85°C with maximum specified ripple current (see page 6)

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

Part Number System

E C E □ □ □ P □ □ □ □ □ A

Common Code / Number of Terminals	
ECET	4 terminal ϕ35 & 40mm dia.
ECEP	5 terminal ϕ 40 & 50mm dia.

Voltage Code

Series

Capacitance Code

Diameter Code

Terminal Style (see pg.40)

Ratings:	Standard	Extended
6.3mm length snap-in (standard):	A	X
4.0mm length "short" terminal:	4	5
4.0mm length straight pin with standoff:	E	Y

T-UP Standard Ratings

Cap. (µF)	Size (mm) D x L	Max 85°C R.C. (A_{rms}) 120 Hz	Max 85°C R.C. (A_{rms}) 10kHz~	Max 20°C E.S.R. (Ω) 120Hz	Max 20°C E.S.R. (Ω) 20kHz	Panasonic Part Number
16 VDC Working, 20 VDC Surge						
47000	35 x 40	7.47	8.59	0.021	0.019	ECET1CP473EA
56000	40 x 40	9.05	10.41	0.022	0.021	ECET1CP563FA
68000	35 x 50	9.05	10.41	0.018	0.017	ECET1CP683EA
82000	35 x 63	10.02	11.52	0.016	0.015	ECET1CP823EA
	40 x 50	10.29	11.83	0.016	0.015	ECET1CP823FA
100000	35 x 80	11.00	12.65	0.015	0.014	ECET1CP104EA
	40 x 63	11.36	13.06	0.018	0.017	ECET1CP104FA
120000	35 x 105	12.81	14.73	0.014	0.013	ECET1CP124EA
	40 x 80	12.42	14.28	0.017	0.016	ECET1CP124FA
	50 x 50	13.17	15.15	0.014	0.013	ECEP1CP124HA
150000	50 x 63	14.40	16.56	0.012	0.011	ECEP1CP154HA
180000	40 x 105	14.85	17.08	0.013	0.012	ECET1CP184FA
	50 x 80	15.69	18.04	0.011	0.010	ECEP1CP184HA
220000	50 x 92	16.73	19.24	0.010	0.009	ECEP1CP224HA
270000	50 x 105	17.79	20.46	0.009	0.008	ECEP1CP274HA
25 VDC Working, 32 VDC Surge						
33000	35 x 40	6.84	7.87	0.019	0.015	ECET1EP333EA
39000	40 x 40	8.00	9.20	0.020	0.018	ECET1EP393FA
47000	35 x 50	8.00	9.20	0.014	0.012	ECET1EP473EA
56000	35 x 63	8.85	10.18	0.015	0.013	ECET1EP563EA
	40 x 50	8.96	10.30	0.016	0.015	ECET1EP563FA
68000	35 x 80	10.43	11.99	0.013	0.011	ECET1EP683EA
	40 x 63	10.25	11.79	0.017	0.015	ECET1EP683FA
82000	50 x 50	12.29	14.13	0.016	0.015	ECEP1EP823HA
100000	35 x 105	11.97	13.77	0.010	0.008	ECET1EP104EA
	40 x 80	12.08	13.89	0.012	0.011	ECET1EP104FA
	50 x 63	13.45	15.47	0.014	0.013	ECEP1EP104HA
120000	50 x 80	15.29	17.58	0.012	0.011	ECEP1EP124HA
150000	40 x 105	14.07	16.18	0.011	0.010	ECET1EP154FA
	50 x 92	16.01	18.41	0.011	0.010	ECEP1EP154HA
180000	50 x 105	16.89	19.42	0.010	0.009	ECEP1EP184HA
35 VDC Working, 44 VDC Surge						
22000	35 x 40	6.10	7.02	0.026	0.020	ECET1VP223EA
27000	40 x 40	6.84	7.87	0.021	0.017	ECET1VP273FA

Cap. (µF)	Size (mm) D x L	Max 85°C R.C. (A_{rms}) 120Hz	Max 85°C R.C. (A_{rms}) 10kHz~	Max 20°C E.S.R. (Ω) 120Hz	Max 20°C E.S.R. (Ω) 20kHz	Panasonic Part Number
35 VDC Working, 44 VDC Surge (continued)						
33000	35 x 50	7.15	8.22	0.018	0.014	ECET1VP333EA
39000	35 x 63	7.94	9.13	0.015	0.012	ECET1VP393EA
	40 x 50	7.98	9.18	0.017	0.014	ECET1VP393FA
47000	35 x 80	9.53	10.96	0.014	0.011	ECET1VP473EA
	40 x 63	9.58	11.02	0.016	0.013	ECET1VP473FA
56000	40 x 80	10.30	11.85	0.015	0.012	ECET1VP563FA
	50 x 50	10.94	12.58	0.015	0.012	ECEP1VP563HA
68000	35 x 105	10.62	12.21	0.010	0.008	ECET1VP683EA
	50 x 63	11.93	13.72	0.013	0.011	ECEP1VP683HA
82000	40 x 105	12.02	13.82	0.012	0.009	ECET1VP823FA
	50 x 80	13.06	15.02	0.012	0.010	ECEP1VP823HA
100000	50 x 92	13.97	16.07	0.011	0.009	ECEP1VP104HA
120000	50 x 105	14.86	17.09	0.010	0.008	ECEP1VP124HA
50 VDC Working, 63 VDC Surge						
15000	35 x 40	6.44	7.41	0.028	0.021	ECET1HP153EA
18000	40 x 40	6.94	7.98	0.023	0.017	ECET1HP183FA
22000	35 x 50	7.57	8.71	0.021	0.017	ECET1HP223EA
27000	35 x 63	8.31	9.56	0.018	0.015	ECET1HP273EA
	40 x 50	8.12	9.34	0.018	0.015	ECET1HP273FA
33000	35 x 80	9.23	10.61	0.015	0.012	ECET1HP333EA
	40 x 63	9.10	10.47	0.018	0.014	ECET1HP333FA
	50 x 50	10.48	12.05	0.018	0.014	ECEP1HP333HA
39000	40 x 80	10.12	11.64	0.015	0.012	ECET1HP393FA
47000	35 x 105	10.27	11.81	0.014	0.011	ECET1HP473EA
	50 x 63	11.54	13.27	0.013	0.010	ECEP1HP473HA
56000	40 x 105	11.47	13.19	0.012	0.009	ECET1HP563FA
	50 x 80	12.46	14.33	0.012	0.009	ECEP1HP563HA
68000	50 x 92	13.17	15.15	0.011	0.009	ECEP1HP683HA
82000	50 x 105	13.87	15.95	0.011	0.008	ECEP1HP823HA
63 VDC Working, 79 VDC Surge						
10000	35 x 40	6.52	7.50	0.041	0.033	ECET1JP103EA
12000	35 x 50	7.15	8.22	0.035	0.028	ECET1JP123EA
	40 x 40	7.15	8.22	0.035	0.028	ECET1JP123FA
15000	35 x 63	7.71	8.87	0.028	0.022	ECET1JP153EA

T-UP Standard Ratings (continued)

Cap. (μF)	Size (mm) D x L	Max. 85°C R.C. (A_{rms}) 120 Hz	Max. 85°C R.C. (A_{rms}) 10kHz~	Max. 20°C E.S.R. (Ω) 120Hz	Max. 20°C E.S.R. (Ω) 20kHz	Panasonic Part Number
63 VDC Working, 79 VDC Surge (continued)						
15000	40 x 50	7.53	8.66	0.033	0.027	**ECET1JP153FA**
18000	35 x 80	9.41	10.82	0.023	0.018	**ECET1JP183EA**
	40 x 63	9.25	10.64	0.028	0.022	**ECET1JP183FA**
27000	35 x 105	10.38	11.94	0.015	0.012	**ECET1JP273EA**
	40 x 80	9.97	11.47	0.018	0.015	**ECET1JP273FA**
	50 x 50	10.86	12.49	0.018	0.015	**ECEP1JP273HA**
33000	40 x 105	11.76	13.52	0.015	0.012	**ECET1JP333FA**
	50 x 63	11.67	13.42	0.017	0.013	**ECEP1JP333HA**
47000	50 x 80	12.78	14.70	0.013	0.010	**ECEP1JP473HA**
51000	50 x 92	13.34	15.34	0.012	0.010	**ECEP1JP513HA**
56000	50 x 105	13.93	16.02	0.012	0.009	**ECEP1JP563HA**
80 VDC Working, 100 VDC Surge						
6800	35 x 40	5.16	5.93	0.046	0.035	**ECET1KP682EA**
8200	35 x 50	5.83	6.70	0.038	0.029	**ECET1KP822EA**
	40 x 40	5.83	6.70	0.038	0.029	**ECET1KP822FA**
10000	35 x 63	6.38	7.34	0.033	0.025	**ECET1KP103EA**
	40 x 50	6.56	7.54	0.033	0.025	**ECET1KP103FA**
12000	35 x 80	6.92	7.96	0.028	0.021	**ECET1KP123EA**
	40 x 63	7.29	8.38	0.028	0.021	**ECET1KP123FA**
15000	40 x 80	8.93	10.27	0.024	0.018	**ECET1KP153FA**
18000	50 x 50	10.00	11.50	0.023	0.017	**ECEP1KP183HA**
22000	35 x 105	9.86	11.34	0.015	0.011	**ECET1KP223EA**
	50 x 63	11.08	12.74	0.019	0.014	**ECEP1KP223HA**
27000	40 x 105	11.35	13.05	0.015	0.012	**ECET1KP273FA**
	50 x 80	12.33	14.18	0.015	0.012	**ECEP1KP273HA**
33000	50 x 92	13.37	15.38	0.014	0.010	**ECEP1KP333HA**
39000	50 x 105	14.34	16.49	0.013	0.010	**ECEP1KP393HA**
100 VDC Working, 125 VDC Surge						
4700	35 x 40	5.13	5.90	0.071	0.049	**ECET2AP472EA**
5600	40 x 40	5.75	6.61	0.059	0.044	**ECET2AP562FA**
6800	35 x 50	6.60	7.59	0.049	0.037	**ECET2AP682EA**
8200	35 x 63	7.05	8.11	0.040	0.030	**ECET2AP822EA**
	40 x 50	7.28	8.37	0.040	0.030	**ECET2AP822FA**
10000	35 x 80	7.74	8.90	0.033	0.025	**ECET2AP103EA**
	40 x 63	7.97	9.17	0.033	0.025	**ECET2AP103FA**
	50 x 50	8.82	10.14	0.033	0.025	**ECEP2AP103HA**
12000	35 x 105	8.57	9.86	0.028	0.021	**ECET2AP123EA**
	40 x 80	8.65	9.95	0.028	0.021	**ECET2AP123FA**
15000	40 x 105	10.12	11.64	0.022	0.017	**ECET2AP153FA**
	50 x 63	10.07	11.58	0.022	0.017	**ECEP2AP153HA**
18000	50 x 80	11.00	12.65	0.018	0.014	**ECEP2AP183HA**
22000	50 x 92	11.76	13.52	0.015	0.011	**ECEP2AP223HA**
27000	50 x 105	12.53	14.41	0.014	0.010	**ECEP2AP273HA**
160 VDC Working, 200 VDC Surge						
2200	35 x 40	4.78	6.69	0.098	0.049	**ECET2CP222EA**
2700	35 x 50	5.45	7.63	0.080	0.044	**ECET2CP272EA**
	40 x 40	5.45	7.63	0.080	0.044	**ECET2CP272FA**
3300	35 x 63	6.29	8.81	0.065	0.036	**ECET2CP332EA**
	40 x 50	6.29	8.81	0.065	0.036	**ECET2CP332FA**
3900	35 x 80	7.27	10.18	0.055	0.030	**ECET2CP392EA**
	40 x 63	7.27	10.18	0.055	0.030	**ECET2CP392FA**
5600	40 x 80	8.32	11.65	0.038	0.021	**ECET2CP562FA**
	50 x 50	8.25	11.55	0.038	0.021	**ECEP2CP562GA**
6800	35 x 105	9.05	12.67	0.032	0.017	**ECET2CP682EA**
8200	50 x 63	8.93	12.50	0.026	0.014	**ECEP2CP822GA**
10000	40 x 105	9.86	13.80	0.022	0.012	**ECET2CP103FA**
	50 x 80	9.80	13.72	0.022	0.012	**ECEP2CP103GA**
12000	50 x 92	12.93	18.10	0.018	0.010	**ECEP2CP123GA**
15000	50 x 105	14.10	19.74	0.014	0.008	**ECEP2CP153GA**
200 VDC Working, 250 VDC Surge						
1800	35 x 40	4.32	6.05	0.120	0.060	**ECET2DP182EA**
2200	35 x 50	4.92	6.89	0.098	0.054	**ECET2DP222EA**
	40 x 40	4.92	6.89	0.098	0.054	**ECET2DP222FA**
2700	35 x 63	5.50	7.70	0.080	0.044	**ECET2DP272EA**
	40 x 50	5.41	7.57	0.080	0.044	**ECET2DP272FA**
3300	35 x 80	6.44	9.02	0.065	0.036	**ECET2DP332EA**
	40 x 63	6.32	8.85	0.065	0.036	**ECET2DP332FA**
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 50	8.22	11.51	0.055	0.030	**ECEP2DP392HA**
4700	40 x 80	8.38	11.73	0.046	0.025	**ECET2DP472FA**
	50 x 63	9.32	13.05	0.046	0.025	**ECEP2DP472HA**
5600	35 x 105	8.90	12.46	0.038	0.021	**ECET2DP562EA**
	50 x 63	9.57	13.40	0.038	0.021	**ECEP2DP562HA**

Cap. (μF)	Size (mm) D x L	Max. 85°C R.C. (A_{rms}) 120Hz	Max. 85°C R.C. (A_{rms}) 10kHz~	Max. 20°C E.S.R. (Ω) 120Hz	Max. 20°C E.S.R. (Ω) 20kHz	Panasonic Part Number
200 VDC Working, 250 VDC Surge (continued)						
6800	40 x 105	8.65	12.11	0.032	0.017	**ECET2DP682FA**
	50 x 80	11.41	15.97	0.032	0.017	**ECEP2DP682HA**
7500	50 x 92	12.28	17.19	0.029	0.016	**ECEP2DP752HA**
8200	50 x 92	13.02	18.23	0.026	0.014	**ECEP2DP822HX**
	50 x 105	13.16	18.42	0.026	0.014	**ECEP2DP822HA**
10000	50 x 105	14.17	19.84	0.021	0.011	**ECEP2DP103HA**
250 VDC Working, 300 VDC Surge						
1200	35 x 40	3.32	4.65	0.166	0.083	**ECET2EP122EA**
1500	35 x 50	4.04	5.66	0.133	0.066	**ECET2EP152EA**
	40 x 40	4.04	5.66	0.133	0.066	**ECET2EP152FA**
1800	35 x 63	4.49	6.29	0.111	0.055	**ECET2EP182EA**
	40 x 50	4.49	6.29	0.111	0.055	**ECET2EP182FA**
2200	35 x 63	4.70	6.58	0.090	0.045	**ECET2EP222EX**
	35 x 80	4.94	6.92	0.090	0.045	**ECET2EP222EA**
	40 x 63	4.94	6.92	0.090	0.045	**ECET2EP222FA**
2700	35 x 80	5.63	7.88	0.074	0.037	**ECET2EP272EA**
	40 x 63	5.81	8.13	0.074	0.037	**ECET2EP272FX**
	50 x 50	6.77	9.48	0.074	0.037	**ECEP2EP272HA**
3300	40 x 80	7.00	9.80	0.060	0.030	**ECET2EP332FA**
	50 x 50	7.22	10.11	0.060	0.060	**ECEP2EP332HX**
	50 x 63	7.79	10.91	0.060	0.030	**ECEP2EP332HA**
3900	35 x 105	7.47	10.46	0.051	0.026	**ECET2EP392EA**
	40 x 80	7.36	10.30	0.051	0.026	**ECET2EP392FA**
	50 x 63	8.19	11.47	0.051	0.026	**ECET2EP392HA**
4700	40 x 105	8.88	12.43	0.042	0.021	**ECET2EP472FA**
	50 x 80	9.65	13.51	0.042	0.021	**ECEP2EP472HA**
5600	50 x 80	14.34	20.08	0.036	0.018	**ECEP2EP562HX**
	50 x 92	10.80	15.12	0.036	0.018	**ECEP2EP562HA**
6800	50 x 105	12.16	17.02	0.029	0.015	**ECEP2EP682HA**
7500	50 x 105	12.56	17.58	0.026	0.014	**ECEP2EP752HA**
350 VDC Working, 400 VDC Surge						
470	35 x 40	2.40	3.36	0.388	0.175	**ECET2VP471EA**
680	35 x 50	2.96	4.14	0.366	0.165	**ECET2VP681EA**
	40 x 40	2.96	4.14	0.366	0.165	**ECET2VP681FA**
1000	35 x 63	3.80	5.32	0.249	0.112	**ECET2VP102EA**
	40 x 50	3.80	5.32	0.249	0.112	**ECET2VP102FA**
1200	35 x 80	4.42	6.19	0.207	0.093	**ECET2VP122EA**
	40 x 63	4.42	6.19	0.207	0.093	**ECET2VP122FA**
	50 x 50	5.18	7.25	0.207	0.093	**ECEP2VP122HA**
1500	50 x 63	6.01	8.41	0.166	0.075	**ECEP2VP152HA**
1800	35 x 105	5.79	8.11	0.138	0.062	**ECET2VP182EA**
	40 x 80	5.85	8.19	0.138	0.062	**ECET2VP182FA**
	50 x 80	6.89	9.65	0.138	0.062	**ECEP2VP182HA**
2200	40 x 105	6.91	9.67	0.113	0.051	**ECET2VP222FA**
	50 x 92	7.79	10.91	0.113	0.051	**ECEP2VP222HA**
2700	50 x 105	8.80	12.32	0.092	0.041	**ECEP2VP272HA**
400 VDC Working, 450 VDC Surge						
470	35 x 45	2.39	3.35	0.388	0.136	**ECET2GP471EX**
560	35 x 50	2.72	3.81	0.326	0.114	**ECET2GP561EA**
	40 x 40	2.69	3.77	0.326	0.114	**ECET2GP561FA**
680	40 x 50	3.38	4.73	0.268	0.093	**ECET2GP681FA**
820	35 x 63	3.55	4.97	0.222	0.078	**ECET2GP821EA**
	40 x 50	3.38	4.73	0.222	0.078	**ECET2GP821FA**
1000	35 x 80	3.42	4.79	0.199	0.080	**ECET2GP102EA**
	40 x 63	4.16	5.82	0.199	0.080	**ECET2GP102FA**
	50 x 50	4.76	6.66	0.199	0.080	**ECEP2GP102HA**
1200	35 x 80	4.52	6.33	0.152	0.053	**ECET2GP122EA**
	40 x 63	4.52	6.33	0.152	0.053	**ECET2GP122FA**
	50 x 50	5.21	7.29	0.166	0.066	**ECEP2GP122HX**
	50 x 63	5.47	7.66	0.166	0.066	**ECEP2GP122HA**
1500	35 x 105	5.44	7.62	0.122	0.043	**ECET2GP152EA**
	40 x 80	5.50	7.70	0.122	0.043	**ECET2GP152FA**
	50 x 63	6.12	8.57	0.133	0.053	**ECEP2GP152HX**
	50 x 80	6.47	9.06	0.133	0.053	**ECEP2GP152HA**
1800	40 x 105	6.53	9.14	0.101	0.035	**ECET2GP182FA**
	50 x 80	7.09	9.93	0.111	0.044	**ECEP2GP182HX**
	50 x 92	7.35	10.29	0.111	0.044	**ECEP2GP182HA**
2200	50 x 92	8.13	11.38	0.090	0.036	**ECEP2GP222HX**
	50 x 105	8.43	11.80	0.090	0.036	**ECEP2GP222HA**
2700	50 x 105	9.34	13.08	0.073	0.025	**ECEP2GP272HA**
450 VDC Working, 500 VDC Surge						
330	35 x 40	2.01	2.81	0.553	0.249	**ECET2WP331EA**
470	35 x 50	2.53	3.54	0.423	0.233	**ECET2WP471EA**
	40 x 35	2.53	3.54	0.423	0.233	**ECET2WP471FA**

T-UP Standard Ratings (continued)

Cap. (μF)	Size (mm) D x L	Max. 85°C R.C. (A_{rms}) 120 Hz	Max. 85°C R.C. (A_{rms}) 10kHz~	Max. 20°C E.S.R. (Ω) 120Hz	Max. 20°C E.S.R. (Ω) 20kHz	Panasonic 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 VDC 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**