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TS-HC Series snap-in style

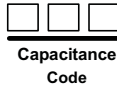


- **Highly miniaturized version (30% smaller than HB series)**
- **2 and 3 pin versions available**
- **2000 hour life at 105°C**
- **Can vent construction**

| | | | | | | | | | |
|--|---|---------------|------|---------|------|------|------|---|----------------------------|
| Rated Working Voltage: | 10 ~ 250 VDC | 350 ~ 450 VDC | | | | | | | |
| Operating Temperature: | -40 ~ +105°C | -25 ~ +105°C | | | | | | | |
| Nominal Capacitance: | 270~100000 µF | 100 ~ 820µF | | | | | | | |
| Capacitance Tolerance: | ± 20% | | | | | | | | |
| Dissipation Factor: (120 Hz, +20°C) | Working Voltage [V]: | | | | | | | | |
| | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 - 450 | |
| | Max. D.F. (%): | | | | | | | | |
| | 55 | 45 | 35 | 30 | 25 | 20 | 17 | 15 | |
| | For capacitance values > 33000µF, add the value of: $\frac{\text{rated cap. } [\mu\text{F}] - 33000}{1000}$ | | | | | | | | |
| Leakage Current: | 3vCV (µA) max. after 5 minutes; C = Capacitance in µF, V = WV | | | | | | | | |
| Ripple Current Multipliers: | Frequency(Hz): | 50 | 60 | 100~120 | 500 | 1k | 10k~ | Ripple Current Ambient Temperature Factors* | |
| | 10~100WV: | 0.93 | 0.95 | 1.0 | 1.05 | 1.08 | 1.15 | Ambient Temperature: | 105°C 85°C 70°C 60°C =45°C |
| | 160~500WV: | 0.75 | 0.8 | 1.0 | 1.2 | 1.25 | 1.4 | Multiplier: | 1.0 1.7 2.0 2.2 2.35 |
| Endurance: | 2000 hours at +105°C with maximum specified ripple current (see page 4) | | | | | | | | |

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

Part Number System



| Diameter | Diameter / Terminal Code | | | |
|----------|--------------------------|-------|-------|-------|
| | # of pins: | 2 | 2 | 3 |
| | pin length: | 6.3mm | 4.0mm | 4.0mm |
| 22mm | | B | H | P |
| 25mm | | C | J | Q |
| 30mm | | D | K | R |
| 35mm | | E | L | S |

(Please see page 7 for details)

| Top Vinyl Plate | |
|-----------------|---------------------------|
| A | with plate |
| | without plate (no suffix) |

TS-HC Standard Ratings (part numbers shown with 2 pins, 6.3mm length terminal, and top vinyl plate)

| Cap. (µF) | Size (mm) D x L | Max 105°C R.C. (A _{rms}) | | 20°C ESR (Ω, max.) | | Panasonic Part Number |
|---|-----------------|------------------------------------|--------|--------------------|--------------|-----------------------|
| | | 120Hz | 10kHz~ | 120Hz | 20kHz | |
| 10 VDC Working, 13 VDC Surge | | | | | | |
| 12000 | 22 x 25 | 2.20 | 2.53 | 0.076 | 0.065 | EETHC1A123BA |
| 18000 | 22 x 30 | 2.40 | 2.76 | 0.051 | 0.043 | EETHC1A183BA |
| | 25 x 25 | 2.40 | 2.76 | 0.051 | 0.043 | EETHC1A183CA |
| 22000 | 22 x 35 | 2.60 | 2.99 | 0.041 | 0.035 | EETHC1A223BA |
| | 25 x 30 | 2.60 | 2.99 | 0.041 | 0.035 | EETHC1A223CA |
| 27000 | 22 x 40 | 3.10 | 3.57 | 0.034 | 0.029 | EETHC1A273BA |
| | 25 x 35 | 3.10 | 3.57 | 0.034 | 0.029 | EETHC1A273CA |
| | 30 x 25 | 3.10 | 3.57 | 0.034 | 0.029 | EETHC1A273DA |
| 33000 | 22 x 45 | 3.40 | 3.91 | 0.028 | 0.023 | EETHC1A333BA |
| | 25 x 40 | 3.40 | 3.91 | 0.028 | 0.023 | EETHC1A333CA |
| 39000 | 25 x 45 | 3.70 | 4.26 | 0.026 | 0.022 | EETHC1A393CA |
| | 30 x 30 | 3.70 | 4.26 | 0.026 | 0.023 | EETHC1A393DA |
| | 35 x 25 | 3.70 | 4.26 | 0.026 | 0.022 | EETHC1A393EA |
| 47000 | 25 x 50 | 4.20 | 4.83 | 0.024 | 0.021 | EETHC1A473CA |
| | 30 x 35 | 4.20 | 4.83 | 0.024 | 0.022 | EETHC1A473DA |
| | 35 x 30 | 4.20 | 4.83 | 0.024 | 0.021 | EETHC1A473EA |
| 56000 | 30 x 40 | 5.00 | 5.75 | 0.023 | 0.021 | EETHC1A563DA |
| | 35 x 35 | 5.00 | 5.75 | 0.023 | 0.020 | EETHC1A563EA |
| 68000 | 30 x 45 | 5.40 | 6.21 | 0.022 | 0.020 | EETHC1A683DA |
| | 35 x 40 | 5.40 | 6.21 | 0.022 | 0.019 | EETHC1A683EA |
| 82000 | 35 x 45 | 6.10 | 7.02 | 0.021 | 0.019 | EETHC1A823EA |
| 100000 | 35 x 50 | 6.90 | 7.94 | 0.020 | 0.019 | EETHC1A104EA |
| 16 VDC Working, 20 VDC Surge | | | | | | |
| 10000 | 22 x 25 | 2.60 | 2.99 | 0.075 | 0.063 | EETHC1C103BA |
| 12000 | 22 x 30 | 2.90 | 3.34 | 0.062 | 0.053 | EETHC1C123BA |
| | 25 x 25 | 2.90 | 3.34 | 0.062 | 0.053 | EETHC1C123CA |
| 15000 | 22 x 35 | 3.20 | 3.68 | 0.050 | 0.042 | EETHC1C153BA |
| 16 VDC Working, 20 VDC Surge (continued) | | | | | | |
| 18000 | 22 x 40 | 3.50 | 4.03 | 0.041 | 0.035 | EETHC1C183BA |
| | 25 x 30 | 3.50 | 4.03 | 0.041 | 0.035 | EETHC1C183CA |
| 22000 | 22 x 45 | 3.80 | 4.37 | 0.034 | 0.029 | EETHC1C223BA |
| | 25 x 35 | 3.80 | 4.37 | 0.034 | 0.029 | EETHC1C223CA |
| | 30 x 25 | 3.80 | 4.37 | 0.034 | 0.029 | EETHC1C223DA |
| 27000 | 22 x 50 | 4.20 | 4.83 | 0.028 | 0.023 | EETHC1C273BA |
| | 25 x 40 | 4.20 | 4.83 | 0.028 | 0.023 | EETHC1C273CA |
| | 30 x 30 | 4.20 | 4.83 | 0.028 | 0.023 | EETHC1C273DA |
| | 35 x 25 | 4.20 | 4.83 | 0.028 | 0.023 | EETHC1C273EA |
| 33000 | 25 x 45 | 4.70 | 5.41 | 0.023 | 0.019 | EETHC1C333CA |
| | 30 x 35 | 4.70 | 5.41 | 0.023 | 0.019 | EETHC1C333DA |
| | 35 x 30 | 4.70 | 5.41 | 0.023 | 0.020 | EETHC1C333EA |
| 39000 | 30 x 40 | 5.10 | 5.87 | 0.022 | 0.018 | EETHC1C393DA |
| | 35 x 35 | 5.10 | 5.87 | 0.022 | 0.020 | EETHC1C393EA |
| 47000 | 30 x 45 | 5.50 | 6.33 | 0.016 | 0.014 | EETHC1C473DA |
| | 35 x 40 | 5.50 | 6.33 | 0.021 | 0.019 | EETHC1C473EA |
| | 30 x 50 | 6.00 | 6.90 | 0.020 | 0.018 | EETHC1C563DA |
| 35 x 45 | 6.00 | 6.90 | 0.020 | 0.018 | EETHC1C563EA | |
| 25 VDC Working, 32 VDC Surge | | | | | | |
| 6800 | 22 x 25 | 2.40 | 2.76 | 0.085 | 0.064 | EETHC1E682BA |
| 8200 | 22 x 30 | 2.70 | 3.11 | 0.071 | 0.053 | EETHC1E822BA |
| | 25 x 25 | 2.70 | 3.11 | 0.071 | 0.053 | EETHC1E822CA |
| 10000 | 22 x 35 | 3.00 | 3.45 | 0.058 | 0.044 | EETHC1E103BA |
| 12000 | 22 x 40 | 3.20 | 3.68 | 0.048 | 0.036 | EETHC1E123BA |
| | 25 x 30 | 3.20 | 3.68 | 0.048 | 0.036 | EETHC1E123CA |
| 15000 | 22 x 45 | 3.60 | 4.14 | 0.039 | 0.029 | EETHC1E153BA |
| | 25 x 35 | 3.60 | 4.14 | 0.039 | 0.029 | EETHC1E153CA |

TS-HC Standard Ratings (continued)

| Cap. (μF) | Size (mm) D x L | Max 105°C R.C. (A _{rms}) | | 20°C ESR (Ω, max.) | | Panasonic Part Number | Cap. (μF) | Size (mm) D x L | Max 105°C R.C. (A _{rms}) | | 20°C ESR (Ω, max.) | | Panasonic Part Number |
|---|-----------------|------------------------------------|--------|--------------------|-------|-----------------------|---|-----------------|------------------------------------|--------|--------------------|--------------|-----------------------|
| | | 120Hz | 10kHz~ | 120Hz | 20kHz | | | | 120Hz | 10kHz~ | 120Hz | 20kHz | |
| 25 VDC Working, 32 VDC Surge (continued) | | | | | | | 63 VDC Working, 79 VDC Surge (continued) | | | | | | |
| 15000 | 30 x 25 | 3.60 | 4.14 | 0.039 | 0.029 | EETHC1E153DA | 4700 | 25 x 35 | 3.00 | 3.45 | 0.071 | 0.053 | EETHC1J472CA |
| 18000 | 22 x 50 | 3.90 | 4.49 | 0.032 | 0.024 | EETHC1E183BA | 5600 | 22 x 50 | 3.30 | 3.80 | 0.059 | 0.044 | EETHC1J562BA |
| | 25 x 40 | 3.90 | 4.49 | 0.032 | 0.024 | EETHC1E183CA | | 25 x 40 | 3.30 | 3.80 | 0.059 | 0.044 | EETHC1J562CA |
| | 30 x 30 | 3.90 | 4.49 | 0.032 | 0.024 | EETHC1E183DA | | 30 x 30 | 3.30 | 3.80 | 0.059 | 0.044 | EETHC1J562DA |
| | 35 x 25 | 3.90 | 4.49 | 0.032 | 0.024 | EETHC1E183EA | | 35 x 25 | 3.30 | 3.80 | 0.059 | 0.044 | EETHC1J562EA |
| 22000 | 25 x 45 | 4.30 | 4.95 | 0.026 | 0.020 | EETHC1E223CA | 6800 | 25 x 45 | 3.60 | 4.14 | 0.049 | 0.037 | EETHC1J682CA |
| | 30 x 35 | 4.30 | 4.95 | 0.026 | 0.020 | EETHC1E223DA | | 30 x 35 | 3.60 | 4.14 | 0.049 | 0.037 | EETHC1J682DA |
| | 35 x 30 | 4.30 | 4.95 | 0.026 | 0.020 | EETHC1E223EA | | 35 x 30 | 3.60 | 4.14 | 0.049 | 0.037 | EETHC1J682EA |
| 27000 | 30 x 40 | 4.80 | 5.52 | 0.021 | 0.016 | EETHC1E273DA | 8200 | 30 x 40 | 3.90 | 4.49 | 0.040 | 0.030 | EETHC1J822DA |
| | 35 x 35 | 4.80 | 5.52 | 0.021 | 0.016 | EETHC1E273EA | | 35 x 35 | 3.90 | 4.49 | 0.040 | 0.030 | EETHC1J822EA |
| 33000 | 30 x 45 | 5.50 | 6.33 | 0.018 | 0.013 | EETHC1E333DA | 10000 | 30 x 45 | 4.40 | 5.06 | 0.033 | 0.025 | EETHC1J103DA |
| | 35 x 40 | 5.50 | 6.33 | 0.018 | 0.014 | EETHC1E333EA | | 35 x 40 | 4.40 | 5.06 | 0.033 | 0.025 | EETHC1J103EA |
| 39000 | 30 x 50 | 5.80 | 6.67 | 0.017 | 0.013 | EETHC1E393DA | 12000 | 30 x 50 | 4.80 | 5.52 | 0.028 | 0.021 | EETHC1J123DA |
| | 35 x 45 | 5.80 | 6.67 | 0.017 | 0.014 | EETHC1E393EA | | 35 x 45 | 4.80 | 5.52 | 0.028 | 0.022 | EETHC1J123EA |
| 47000 | 35 x 50 | 6.30 | 7.25 | 0.017 | 0.014 | EETHC1E473EA | 15000 | 35 x 50 | 5.40 | 6.21 | 0.022 | 0.018 | EETHC1J153EA |
| 35 VDC Working, 44 VDC Surge | | | | | | | 80 VDC Working, 100 VDC Surge | | | | | | |
| 4700 | 22 x 25 | 2.20 | 2.53 | 0.106 | 0.079 | EETHC1V472BA | 1200 | 22 x 25 | 1.50 | 1.73 | 0.235 | 0.176 | EETHC1K122BA |
| 5600 | 22 x 30 | 2.40 | 2.76 | 0.089 | 0.067 | EETHC1V562BA | 1500 | 22 x 30 | 1.70 | 1.96 | 0.188 | 0.141 | EETHC1K152BA |
| | 25 x 25 | 2.40 | 2.76 | 0.089 | 0.067 | EETHC1V562CA | | 25 x 25 | 1.70 | 1.96 | 0.188 | 0.141 | EETHC1K152CA |
| 6800 | 22 x 35 | 2.60 | 2.99 | 0.073 | 0.055 | EETHC1V682BA | 1800 | 22 x 35 | 1.80 | 2.07 | 0.157 | 0.117 | EETHC1K182BA |
| 8200 | 22 x 40 | 2.90 | 3.34 | 0.061 | 0.045 | EETHC1V822BA | 2200 | 22 x 40 | 2.10 | 2.42 | 0.128 | 0.096 | EETHC1K222BA |
| | 25 x 30 | 2.90 | 3.34 | 0.061 | 0.045 | EETHC1V822CA | | 25 x 30 | 2.10 | 2.42 | 0.128 | 0.096 | EETHC1K222CA |
| 10000 | 22 x 45 | 3.20 | 3.68 | 0.050 | 0.037 | EETHC1V103BA | 2700 | 22 x 45 | 2.40 | 2.76 | 0.104 | 0.078 | EETHC1K272BA |
| | 25 x 35 | 3.20 | 3.68 | 0.050 | 0.037 | EETHC1V103CA | | 25 x 35 | 2.40 | 2.76 | 0.104 | 0.078 | EETHC1K272CA |
| | 30 x 25 | 3.20 | 3.68 | 0.050 | 0.037 | EETHC1V103DA | | 30 x 25 | 2.40 | 2.76 | 0.104 | 0.078 | EETHC1K272DA |
| 12000 | 25 x 40 | 3.50 | 4.03 | 0.041 | 0.031 | EETHC1V123CA | 3300 | 22 x 50 | 2.60 | 2.99 | 0.085 | 0.064 | EETHC1K332BA |
| | 30 x 30 | 3.50 | 4.03 | 0.041 | 0.031 | EETHC1V123DA | | 25 x 40 | 2.60 | 2.99 | 0.085 | 0.064 | EETHC1K332CA |
| | 35 x 25 | 3.50 | 4.03 | 0.041 | 0.031 | EETHC1V123EA | | 30 x 30 | 2.60 | 2.99 | 0.085 | 0.064 | EETHC1K332DA |
| 15000 | 25 x 45 | 3.90 | 4.49 | 0.033 | 0.025 | EETHC1V153CA | 3900 | 35 x 25 | 2.60 | 2.99 | 0.085 | 0.064 | EETHC1K332EA |
| | 30 x 35 | 3.90 | 4.49 | 0.033 | 0.025 | EETHC1V153DA | | 25 x 45 | 3.00 | 3.45 | 0.072 | 0.054 | EETHC1K392CA |
| | 35 x 30 | 3.90 | 4.49 | 0.033 | 0.025 | EETHC1V153EA | | 30 x 35 | 3.00 | 3.45 | 0.072 | 0.054 | EETHC1K392DA |
| 18000 | 30 x 40 | 4.30 | 4.95 | 0.028 | 0.021 | EETHC1V183DA | 4700 | 25 x 50 | 3.30 | 3.80 | 0.060 | 0.045 | EETHC1K472CA |
| | 35 x 35 | 4.30 | 4.95 | 0.028 | 0.021 | EETHC1V183EA | | 30 x 40 | 3.30 | 3.80 | 0.060 | 0.045 | EETHC1K472DA |
| 22000 | 30 x 45 | 5.00 | 5.75 | 0.023 | 0.017 | EETHC1V223DA | 5600 | 35 x 30 | 3.30 | 3.80 | 0.060 | 0.045 | EETHC1K472EA |
| | 35 x 40 | 5.00 | 5.75 | 0.023 | 0.017 | EETHC1V223EA | | 30 x 45 | 3.70 | 4.26 | 0.050 | 0.038 | EETHC1K562DA |
| 27000 | 30 x 50 | 5.30 | 6.10 | 0.018 | 0.014 | EETHC1V273DA | 6800 | 35 x 35 | 3.70 | 4.26 | 0.050 | 0.038 | EETHC1K562EA |
| | 35 x 45 | 5.30 | 6.10 | 0.018 | 0.014 | EETHC1V273EA | | 30 x 50 | 3.90 | 4.49 | 0.041 | 0.031 | EETHC1K682DA |
| 33000 | 35 x 50 | 5.90 | 6.79 | 0.015 | 0.012 | EETHC1V333EA | 35 x 40 | 3.90 | 4.49 | 0.041 | 0.032 | EETHC1K682EA | |
| 2700 | 22 x 25 | 1.80 | 2.07 | 0.154 | 0.115 | EETHC1H272BA | 8200 | 35 x 45 | 4.50 | 5.18 | 0.034 | 0.027 | EETHC1K822EA |
| 50 VDC Working, 63 VDC Surge | | | | | | | 100 VDC Working, 125 VDC Surge | | | | | | |
| 3300 | 22 x 30 | 2.00 | 2.30 | 0.126 | 0.094 | EETHC1H332BA | 820 | 22 x 25 | 1.40 | 1.61 | 0.303 | 0.197 | EETHC2A821BA |
| 3900 | 22 x 35 | 2.20 | 2.53 | 0.106 | 0.080 | EETHC1H392BA | 1200 | 22 x 30 | 1.80 | 2.07 | 0.207 | 0.135 | EETHC2A122BA |
| | 25 x 25 | 2.20 | 2.53 | 0.106 | 0.080 | EETHC1H392CA | | 25 x 25 | 1.80 | 2.07 | 0.207 | 0.135 | EETHC2A122CA |
| 4700 | 22 x 40 | 2.50 | 2.88 | 0.088 | 0.066 | EETHC1H472BA | 1500 | 22 x 35 | 2.10 | 2.42 | 0.166 | 0.108 | EETHC2A152BA |
| | 25 x 30 | 2.50 | 2.88 | 0.088 | 0.066 | EETHC1H472CA | | 25 x 30 | 2.10 | 2.42 | 0.166 | 0.108 | EETHC2A152CA |
| 5600 | 22 x 45 | 2.80 | 3.22 | 0.074 | 0.056 | EETHC1H562BA | 1800 | 22 x 40 | 2.30 | 2.65 | 0.138 | 0.090 | EETHC2A182BA |
| | 25 x 35 | 2.80 | 3.22 | 0.074 | 0.056 | EETHC1H562CA | | 25 x 35 | 2.30 | 2.65 | 0.138 | 0.090 | EETHC2A182CA |
| | 30 x 25 | 2.80 | 3.22 | 0.074 | 0.056 | EETHC1H562DA | | 30 x 25 | 2.30 | 2.65 | 0.138 | 0.090 | EETHC2A182DA |
| 6800 | 22 x 50 | 3.30 | 3.80 | 0.061 | 0.046 | EETHC1H682BA | 2200 | 22 x 45 | 2.60 | 2.99 | 0.113 | 0.073 | EETHC2A222BA |
| | 25 x 40 | 3.30 | 3.80 | 0.061 | 0.046 | EETHC1H682CA | | 25 x 40 | 2.60 | 2.99 | 0.113 | 0.073 | EETHC2A222CA |
| | 30 x 30 | 3.30 | 3.80 | 0.061 | 0.046 | EETHC1H682DA | | 30 x 30 | 2.60 | 2.99 | 0.113 | 0.073 | EETHC2A222DA |
| | 35 x 25 | 3.30 | 3.80 | 0.061 | 0.046 | EETHC1H682EA | | 35 x 25 | 2.60 | 2.99 | 0.113 | 0.073 | EETHC2A222EA |
| 8200 | 25 x 45 | 3.60 | 4.14 | 0.051 | 0.038 | EETHC1H822CA | 2700 | 25 x 45 | 2.90 | 3.34 | 0.092 | 0.060 | EETHC2A272CA |
| | 30 x 35 | 3.60 | 4.14 | 0.051 | 0.038 | EETHC1H822DA | | 30 x 35 | 2.90 | 3.34 | 0.092 | 0.060 | EETHC2A272DA |
| 10000 | 25 x 50 | 4.00 | 4.60 | 0.041 | 0.031 | EETHC1H103CA | 3300 | 25 x 50 | 3.20 | 3.68 | 0.075 | 0.049 | EETHC2A332CA |
| | 30 x 40 | 4.00 | 4.60 | 0.041 | 0.031 | EETHC1H103DA | | 30 x 40 | 3.20 | 3.68 | 0.075 | 0.049 | EETHC2A332DA |
| | 35 x 30 | 4.00 | 4.60 | 0.041 | 0.031 | EETHC1H103EA | | 35 x 30 | 3.20 | 3.68 | 0.075 | 0.049 | EETHC2A332EA |
| 12000 | 30 x 45 | 4.50 | 5.18 | 0.035 | 0.026 | EETHC1H123DA | 3900 | 30 x 45 | 3.60 | 4.14 | 0.064 | 0.043 | EETHC2A392DA |
| | 35 x 35 | 4.50 | 5.18 | 0.035 | 0.028 | EETHC1H123EA | | 35 x 35 | 3.60 | 4.14 | 0.064 | 0.043 | EETHC2A392EA |
| 15000 | 30 x 50 | 4.80 | 5.52 | 0.028 | 0.021 | EETHC1H153DA | 4700 | 30 x 50 | 3.80 | 4.37 | 0.053 | 0.038 | EETHC2A472DA |
| | 35 x 40 | 4.80 | 5.52 | 0.028 | 0.022 | EETHC1H153EA | | 35 x 40 | 3.80 | 4.37 | 0.053 | 0.037 | EETHC2A472EA |
| 18000 | 35 x 45 | 5.60 | 6.44 | 0.023 | 0.018 | EETHC1H183EA | 5600 | 35 x 45 | 4.20 | 4.83 | 0.044 | 0.031 | EETHC2A562EA |
| 63 VDC Working, 79 VDC Surge | | | | | | | 160 VDC Working, 200 VDC Surge | | | | | | |
| 2200 | 22 x 25 | 2.00 | 2.30 | 0.151 | 0.113 | EETHC1J222BA | 470 | 22 x 25 | 1.40 | 1.96 | 0.423 | 0.190 | EETHC2C471BA |
| 2700 | 22 x 30 | 2.20 | 2.53 | 0.123 | 0.092 | EETHC1J272BA | 560 | 22 x 30 | 1.50 | 2.10 | 0.355 | 0.160 | EETHC2C561BA |
| | 25 x 25 | 2.20 | 2.53 | 0.123 | 0.092 | EETHC1J272CA | | 680 | 22 x 30 | 1.70 | 2.38 | 0.293 | 0.132 |
| 3300 | 22 x 35 | 2.50 | 2.88 | 0.100 | 0.075 | EETHC1J332BA | 820 | 25 x 25 | 1.70 | 2.38 | 0.293 | 0.132 | EETHC2C681CA |
| 3900 | 22 x 40 | 2.70 | 3.11 | 0.085 | 0.064 | EETHC1J392BA | | 22 x 35 | 2.00 | 2.80 | 0.243 | 0.109 | EETHC2C821BA |
| | 25 x 30 | 2.70 | 3.11 | 0.085 | 0.064 | EETHC1J392CA | 25 x 30 | | 2.00 | 2.80 | 0.243 | 0.109 | EETHC2C821CA |
| | 30 x 25 | 2.70 | 3.11 | 0.085 | 0.064 | EETHC1J392DA | 1000 | | 22 x 40 | 2.20 | 3.08 | 0.199 | 0.090 |
| 4700 | 22 x 45 | 3.00 | 3.45 | 0.071 | 0.053 | EETHC1J472BA | | | | | | | |

TS-HC Standard Ratings (continued)

| Cap. (µF) | Size (mm) D x L | Max 105°C R.C. (A _{rms}) | | 20°C ESR (Ω, max.) | | Panasonic Part Number | Cap. (µF) | Size (mm) D x L | Max 105°C R.C. (A _{rms}) | | 20°C ESR (Ω, max.) | | Panasonic Part Number | |
|---|--------------------|------------------------------------|--------|--------------------|-------|--------------------------|---|--------------------|------------------------------------|--------|--------------------|-------|--------------------------|--------------|
| | | 120Hz | 10kHz~ | 120Hz | 20kHz | | | | 120Hz | 10kHz~ | 120Hz | 20kHz | | |
| 160 VDC Working, 200 VDC Surge (continued) | | | | | | | 350 VDC Working, 400 VDC Surge (continued) | | | | | | | |
| 1000 | 25 x 35 | 2.20 | 3.08 | 0.199 | 0.090 | EETHC2C102CA | 330 | 25 x 40 | 1.20 | 1.68 | 0.502 | 0.226 | EETHC2V331CA | |
| | 30 x 25 | 2.20 | 3.08 | 0.216 | 0.108 | EETHC2C102DA | | 30 x 30 | 1.20 | 1.68 | 0.502 | 0.226 | EETHC2V331DA | |
| 1200 | 22 x 45 | 2.30 | 3.22 | 0.166 | 0.075 | EETHC2C122BA | 390 | 25 x 45 | 1.30 | 1.82 | 0.425 | 0.191 | EETHC2V391CA | |
| | 25 x 40 | 2.30 | 3.22 | 0.166 | 0.075 | EETHC2C122CA | | | 30 x 35 | 1.30 | 1.82 | 0.425 | 0.191 | EETHC2V391DA |
| | 30 x 30 | 2.30 | 3.22 | 0.166 | 0.075 | EETHC2C122DA | 470 | 25 x 50 | 1.40 | 1.96 | 0.353 | 0.159 | EETHC2V471CA | |
| | 35 x 25 | 2.30 | 3.22 | 0.180 | 0.090 | EETHC2C122EA | | | 35 x 30 | 1.40 | 1.96 | 0.353 | 0.159 | EETHC2V471EA |
| 1500 | 25 x 45 | 2.50 | 3.50 | 0.133 | 0.060 | EETHC2C152CA | 560 | 30 x 45 | 1.50 | 2.10 | 0.296 | 0.133 | EETHC2V561DA | |
| | 30 x 35 | 2.50 | 3.50 | 0.133 | 0.060 | EETHC2C152DA | | | 35 x 35 | 1.50 | 2.10 | 0.296 | 0.133 | EETHC2V561EA |
| | 35 x 30 | 2.50 | 3.50 | 0.155 | 0.077 | EETHC2C152EA | 680 | 30 x 50 | 1.70 | 2.38 | 0.244 | 0.110 | EETHC2V681DA | |
| 1800 | 25 x 50 | 2.70 | 3.78 | 0.111 | 0.050 | EETHC2C182CA | | | 35 x 40 | 1.70 | 2.38 | 0.244 | 0.110 | EETHC2V681EA |
| | 30 x 40 | 2.70 | 3.78 | 0.111 | 0.050 | EETHC2C182DA | 820 | 35 x 45 | 1.90 | 2.66 | 0.202 | 0.091 | EETHC2V821EA | |
| | 35 x 30 | 2.70 | 3.78 | 0.120 | 0.060 | EETHC2C182EA | | | | | | | | |
| 200 VDC Working, 250 VDC Surge | | | | | | | 400 VDC Working, 450 VDC Surge | | | | | | | |
| 390 | 22 x 25 | 1.31 | 1.83 | 0.510 | 0.230 | EETHC2D391BA | 100 | 22 x 25 | 0.70 | 0.98 | 1.824 | 0.821 | EETHC2G101BA | |
| 470 | 22 x 30 | 1.45 | 2.03 | 0.423 | 0.190 | EETHC2D471BA | 120 | 22 x 30 | 0.75 | 1.05 | 1.520 | 0.684 | EETHC2G121BA | |
| 560 | 22 x 30 | 1.67 | 2.34 | 0.355 | 0.160 | EETHC2D561BA | 150 | 22 x 30 | 0.88 | 1.23 | 1.216 | 0.547 | EETHC2G151BA | |
| 680 | 22 x 40 | 1.75 | 2.45 | 0.293 | 0.132 | EETHC2D681BA | 180 | 22 x 35 | 0.95 | 1.33 | 1.013 | 0.456 | EETHC2G181BA | |
| | 25 x 30 | 1.75 | 2.45 | 0.293 | 0.132 | EETHC2D681CA | | | 25 x 30 | 0.95 | 1.33 | 1.013 | 0.456 | EETHC2G181CA |
| 820 | 22 x 45 | 2.04 | 2.86 | 0.243 | 0.109 | EETHC2D821BA | 220 | 22 x 45 | 1.10 | 1.54 | 0.829 | 0.373 | EETHC2G221BA | |
| | 25 x 35 | 2.04 | 2.86 | 0.243 | 0.109 | EETHC2D821CA | | | 25 x 35 | 1.10 | 1.54 | 0.829 | 0.373 | EETHC2G221CA |
| | 30 x 25 | 2.04 | 2.86 | 0.243 | 0.109 | EETHC2D821DA | | 30 x 25 | 1.10 | 1.54 | 0.829 | 0.373 | EETHC2G221DA | |
| 1000 | 22 x 50 | 2.30 | 3.22 | 0.199 | 0.090 | EETHC2D102BA | 270 | 22 x 50 | 1.22 | 1.71 | 0.675 | 0.304 | EETHC2G271BA | |
| | 25 x 45 | 2.30 | 3.22 | 0.199 | 0.090 | EETHC2D102CA | | | 25 x 40 | 1.22 | 1.71 | 0.675 | 0.304 | EETHC2G271CA |
| | 30 x 30 | 2.30 | 3.22 | 0.199 | 0.090 | EETHC2D102DA | | 30 x 30 | 1.22 | 1.71 | 0.675 | 0.304 | EETHC2G271DA | |
| | 35 x 25 | 2.30 | 3.22 | 0.216 | 0.097 | EETHC2D102EA | | 35 x 25 | 1.22 | 1.71 | 0.675 | 0.304 | EETHC2G271EA | |
| 1200 | 25 x 50 | 2.65 | 3.71 | 0.166 | 0.075 | EETHC2D122CA | 330 | 25 x 45 | 1.44 | 2.02 | 0.553 | 0.249 | EETHC2G331CA | |
| | 30 x 35 | 2.65 | 3.71 | 0.166 | 0.075 | EETHC2D122DA | | | 30 x 35 | 1.44 | 2.02 | 0.553 | 0.249 | EETHC2G331DA |
| | 35 x 30 | 2.65 | 3.71 | 0.180 | 0.090 | EETHC2D122EA | | 35 x 30 | 1.44 | 2.02 | 0.553 | 0.249 | EETHC2G331EA | |
| 1500 | 30 x 40 | 2.80 | 3.92 | 0.133 | 0.060 | EETHC2D152DA | 390 | 25 x 50 | 1.55 | 2.17 | 0.468 | 0.210 | EETHC2G391CA | |
| | 35 x 30 | 2.80 | 3.92 | 0.144 | 0.072 | EETHC2D152EA | | | 30 x 40 | 1.55 | 2.17 | 0.468 | 0.210 | EETHC2G391DA |
| | | | | | | | | 35 x 30 | 1.55 | 2.17 | 0.468 | 0.210 | EETHC2G391EA | |
| 1800 | 30 x 45 | 3.08 | 4.31 | 0.111 | 0.050 | EETHC2D182DA | 470 | 30 x 45 | 1.68 | 2.35 | 0.388 | 0.175 | EETHC2G471DA | |
| | 35 x 40 | 3.08 | 4.31 | 0.129 | 0.064 | EETHC2D182EA | | | 35 x 35 | 1.68 | 2.35 | 0.388 | 0.175 | EETHC2G471EA |
| 2200 | 30 x 50 | 3.48 | 4.87 | 0.090 | 0.041 | EETHC2D222DA | 560 | 30 x 50 | 1.90 | 2.66 | 0.326 | 0.147 | EETHC2G561DA | |
| | 35 x 45 | 3.48 | 4.87 | 0.098 | 0.044 | EETHC2D222EA | | | 35 x 40 | 1.90 | 2.66 | 0.326 | 0.147 | EETHC2G561EA |
| 250 VDC Working, 300 VDC Surge | | | | | | | 450 VDC Working, 500 VDC Surge | | | | | | | |
| 270 | 22 x 25 | 1.10 | 1.54 | 0.614 | 0.276 | EETHC2E271BA | 100 | 22 x 30 | 0.64 | 0.90 | 1.824 | 0.821 | EETHC2W101BA | |
| 330 | 22 x 30 | 1.20 | 1.68 | 0.502 | 0.226 | EETHC2E331BA | | 25 x 25 | 0.64 | 0.90 | 1.824 | 0.821 | EETHC2W101CA | |
| | 25 x 25 | 1.20 | 1.68 | 0.502 | 0.226 | EETHC2E331CA | 120 | 22 x 35 | 0.72 | 1.01 | 1.520 | 0.684 | EETHC2W121BA | |
| 390 | 22 x 35 | 1.30 | 1.82 | 0.425 | 0.191 | EETHC2E391BA | | | 25 x 30 | 0.72 | 1.01 | 1.520 | 0.684 | EETHC2W121CA |
| | 25 x 25 | 1.30 | 1.82 | 0.425 | 0.191 | EETHC2E391CA | 150 | 22 x 40 | 0.79 | 1.11 | 1.216 | 0.547 | EETHC2W151BA | |
| 470 | 22 x 40 | 1.40 | 1.96 | 0.353 | 0.159 | EETHC2E471BA | | | 25 x 30 | 0.79 | 1.11 | 1.216 | 0.547 | EETHC2W151CA |
| | 25 x 30 | 1.40 | 1.96 | 0.353 | 0.159 | EETHC2E471CA | | | 30 x 25 | 0.79 | 1.11 | 1.216 | 0.547 | EETHC2W151DA |
| 560 | 22 x 45 | 1.50 | 2.10 | 0.296 | 0.133 | EETHC2E561BA | 180 | 22 x 45 | 0.87 | 1.22 | 1.013 | 0.456 | EETHC2W181BA | |
| | 25 x 35 | 1.50 | 2.10 | 0.296 | 0.133 | EETHC2E561CA | | | 25 x 40 | 0.87 | 1.22 | 1.013 | 0.456 | EETHC2W181CA |
| | 30 x 25 | 1.50 | 2.10 | 0.296 | 0.133 | EETHC2E561DA | | 30 x 30 | 0.87 | 1.22 | 1.013 | 0.456 | EETHC2W181DA | |
| 680 | 22 x 50 | 1.70 | 2.38 | 0.244 | 0.110 | EETHC2E681BA | 220 | 25 x 45 | 1.00 | 1.40 | 0.829 | 0.373 | EETHC2W221CA | |
| | 25 x 40 | 1.70 | 2.38 | 0.244 | 0.110 | EETHC2E681CA | | | 30 x 30 | 1.00 | 1.40 | 0.829 | 0.373 | EETHC2W221DA |
| | 30 x 30 | 1.70 | 2.38 | 0.244 | 0.110 | EETHC2E681DA | 270 | 35 x 25 | 1.00 | 1.40 | 0.829 | 0.373 | EETHC2W221EA | |
| | 35 x 25 | 1.70 | 2.38 | 0.244 | 0.110 | EETHC2E681EA | | | 25 x 50 | 1.19 | 1.67 | 0.675 | 0.304 | EETHC2W271CA |
| 820 | 25 x 45 | 2.00 | 2.80 | 0.202 | 0.091 | EETHC2E821CA | | 30 x 40 | 1.19 | 1.67 | 0.675 | 0.304 | EETHC2W271DA | |
| | 30 x 35 | 2.00 | 2.80 | 0.202 | 0.091 | EETHC2E821DA | 330 | 35 x 30 | 1.19 | 1.67 | 0.675 | 0.304 | EETHC2W271EA | |
| | 35 x 30 | 2.00 | 2.80 | 0.202 | 0.091 | EETHC2E821EA | | | 30 x 45 | 1.38 | 1.93 | 0.553 | 0.249 | EETHC2W331DA |
| 1000 | 30 x 40 | 2.20 | 3.08 | 0.166 | 0.075 | EETHC2E102DA | 390 | 35 x 35 | 1.38 | 1.93 | 0.553 | 0.249 | EETHC2W331EA | |
| 1200 | 30 x 45 | 2.30 | 3.22 | 0.138 | 0.062 | EETHC2E122DA | | | 30 x 50 | 1.55 | 2.17 | 0.468 | 0.210 | EETHC2W391DA |
| 1500 | 35 x 45 | 2.50 | 3.50 | 0.111 | 0.050 | EETHC2E152EA | 470 | 35 x 40 | 1.55 | 2.17 | 0.468 | 0.210 | EETHC2W391EA | |
| 1800 | 35 x 50 | 2.70 | 3.78 | 0.092 | 0.041 | EETHC2E182EA | | | 35 x 45 | 1.74 | 2.44 | 0.388 | 0.175 | EETHC2W471EA |
| 350 VDC Working, 400 VDC Surge | | | | | | | 560 | 35 x 50 | 1.90 | 2.66 | 0.326 | 0.147 | EETHC2W561EA | |
| 120 | 22 x 25 | 0.75 | 1.05 | 1.382 | 0.622 | EETHC2V121BA | | | | | | | | |
| 150 | 22 x 30 | 0.82 | 1.15 | 1.105 | 0.497 | EETHC2V151BA | | | | | | | | |
| 180 | 22 x 30 | 0.90 | 1.26 | 0.921 | 0.414 | EETHC2V181BA | | | | | | | | |
| | 25 x 25 | 0.90 | 1.26 | 0.921 | 0.414 | EETHC2V181CA | | | | | | | | |
| 220 | 22 x 35 | 1.00 | 1.40 | 0.754 | 0.339 | EETHC2V221BA | | | | | | | | |
| | 25 x 30 | 1.00 | 1.40 | 0.754 | 0.339 | EETHC2V221CA | | | | | | | | |
| 270 | 25 x 35 | 1.10 | 1.54 | 0.614 | 0.276 | EETHC2V271CA | | | | | | | | |
| | 30 x 25 | 1.10 | 1.54 | 0.614 | 0.276 | EETHC2V271DA | | | | | | | | |