

# PHC

## Metallized Polypropylene Film Capacitors for Switching Circuits



- Switching capacitor for industrial controls
- Motor speed control
- SMPS
- High end audio
- Resonant circuits
- Induction heaters
- High frequency electronic ballasts

|   |      |  |       |            |        |      |      |
|---|------|--|-------|------------|--------|------|------|
| <b>Operating Temperature Range</b>  |      | -40°C to +85°C   |       |            |        |      |      |
| <b>Capacitance Tolerance</b>  |      | +/- 10% at 1kHz, 20°C  |       |            |        |      |      |
| <b>Rated Voltage</b>  | WVDC | 250  | 330   | 400        | 600    | 700  | 850  |
|   | SVDC | 400  | 500   | 600        | 800    | 1000 | 1200 |
|   | VAC  | 160  | 200   | 250        | 330    | 400  | 450  |
| <b>Dissipation Factor (max) at 20°C.</b>                                  |      | Freq (kHz)   | C≤5μF | 5μF<C≤30μF | C>30μF |      |      |
|   |      | 1  | .06%  | .1%        | .15%   |      |      |
| <b>Insulation Resistance @20°C(&lt;70% RH) for 1 minute at 100VDC</b>     |      | > 30,000MΩ x μF<br>not to exceed 30,000MΩ  |       |            |        |      |      |
| <b>Peak Current - I<sub>PEAK</sub> (Non-repetitive)</b>                   |      | I <sub>PEAK</sub> = 1.5°C*dv/dt Maximum  |       |            |        |      |      |
| <b>Dielectric Strength</b>  |      | 200% of rated WVDC for 10 seconds at 20°C between leads.<br>3KV at 60Hz for 60 seconds between leads and case. |       |            |        |      |      |
| <b>Self inductance</b>  |      | <1nH/mm of body length and lead wire length.   |       |            |        |      |      |
| <b>Capacitance drift</b>  |      | <1.0% up to 40°C after 2 years   |       |            |        |      |      |
| <b>Temperature Coefficient</b>  |      | -200ppm/°C +/- 100ppm/°C   |       |            |        |      |      |
| <b>Life Expectancy</b><br><small>Capacitance change (typical) -5%</small> |      | ≥30,000 hours @VAC at 70°C<br>≥100,000 hours @WVDC at 70°C   |       |            |        |      |      |
| <b>Failure rate</b>   |      | 300/billion component hours  |       |            |        |      |      |
| <b>Dielectric</b>   |      | Polypropylene  |       |            |        |      |      |
| <b>Electrodes</b>   |      | Vacuum deposited metal layers  |       |            |        |      |      |
| <b>Construction</b>   |      | Metallized film with internal series connections for VDC = 850VDC  |       |            |        |      |      |
| <b>Leads</b>  |      | Tinned copper wire leads.  |       |            |        |      |      |
| <b>Coating</b>  |      | Flame retardant polyester tape wrap (UL 510) with epoxy end fills (UL94V-0)                                    |       |            |        |      |      |

## PHYSICAL DIMENSIONS

| WVDC (VAC)<br>μF | 250 (160)          | 330 (200)                 | 400 (250)               | 600 (330)                   | 700 (400)                   | 850 (450)                   |
|------------------|--------------------|---------------------------|-------------------------|-----------------------------|-----------------------------|-----------------------------|
| 0.1              |                    |                           |                         |                             |                             | 11.5x29                     |
| 0.15             |                    |                           |                         |                             |                             | 12x34<br>13x29              |
| 0.22             |                    |                           |                         |                             | 11.5x34<br>12.5x29          | 13.5x34<br>15x29            |
| 0.33             |                    |                           | 12x29                   | 13.5x34<br>15x29            | 16x34<br>17.5x29            | 18.5x34                     |
| 0.47             |                    | 11x29                     | 12.5x34<br>13.5x29      | 14x34<br>16x29              | 17.5x34                     | 18x46<br>21.5x34            |
| 0.68             | 11x29              | 12x34<br>13x29            | 17.5x34                 | 18x46<br>21.5x34            | 20x46<br>24x34              | 25.5x46                     |
| 1                | 13x29              | 15.5x34<br>17.5x29        | 20x34                   | 21.5x46                     | 29x46                       | 25x59<br>26.5x55<br>30x46   |
| 1.2              | 12.5x34<br>14.5x29 | 15x34<br>16.5x29          | 17.5x34                 | 20x46<br>25x34              | 24.5x46                     | 26.5x59<br>28x55<br>32x46   |
| 1.5              | 13x34<br>15x29     | 15.5x34<br>17.5x29        | 18.5x34                 | 21x46<br>24x34              | 25.5x46                     | 29x59<br>30.5x55<br>34.5x46 |
| 2                | 14x34<br>15.5x29   | 16.5x34                   | 19x34                   | 22x46                       | 27x46                       | 30x59<br>32x55              |
| 2.2              | 15x34<br>17x29     | 18.5x34                   | 21x34                   | 24x46                       | 29x46                       | 33x59<br>35x55              |
| 2.5              | 15.5x34            | 19x34                     | 19x46<br>22x34          | 25x46                       | 30.5x46                     | 33.5x59<br>37x55            |
| 3                | 17x34              | 20.5x34                   | 20.5x46<br>24x34        | 27x46                       | 27.5x59<br>29x55<br>33.5x46 | 36.5x59<br>38x55            |
| 3.3              | 18x34              | 19x46<br>22x34            | 22x46                   | 24.5x59<br>26.5x55<br>29x46 | 29.5x59<br>31x55            | 40.5x55                     |
| 4                | 18.5x34            | 19.5x46<br>22.5x34        | 22.5x46                 | 25x59<br>27x55<br>29.5x46   | 30.5x59<br>32x55            | 41.5x59                     |
| 4.7              | 21x34              | 22x46                     | 26x46                   | 28.5x59<br>30x55            | 35x59<br>38x55              | 41.5x59                     |
| 5                | 21x34              | 22x46                     | 26x46                   | 28.5x59<br>30x55            | 35x59<br>38x55              | 41.5x59                     |
| 5.6              | 24x34<br>27.5x46   | 26x46                     | 26x59<br>27x55<br>31x46 | 33.5x59<br>35x55            | 41.5x55                     | 41.5x59                     |
| 6.8              | 24x34<br>27.5x46   | 26x46                     | 26x59<br>27x55<br>31x46 | 33.5x59<br>35x55            | 41.5x55                     | 41.5x59                     |
| 8.2              | 25.5x46            | 26.5x59<br>28x55<br>37x46 | 33x55                   | 37.5x59<br>42.9x55          | 39x57<br>41x59              | 41.5x59                     |
| 10               | 25.5x46            | 26.5x59<br>28x55<br>37x46 | 33x55                   | 37.5x59<br>42.9x55          | 39x57<br>41x59              | 41.5x59                     |
| 12.5             | 22x29              | 30x59<br>31.5x55          | 35x59<br>37x55          |                             |                             |                             |

Convert to inches, divide by 25.4

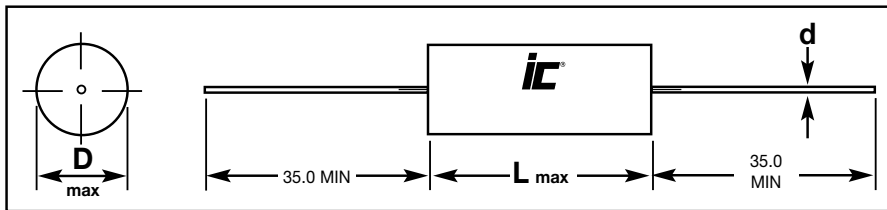
DxL(mm)

## PHYSICAL DIMENSIONS

| $\mu\text{F}$ \diagdown<br>WVDC<br>(VAC) | 250<br>(160)     | 330<br>(200)       | 400<br>(250)     | 600<br>(330) | 700<br>(400) | 850<br>(450) |
|--|------------------|--------------------|------------------|--------------|--------------|--------------|
| 22                                       | 30.5x46          | 31x59<br>33x55     | 37x59<br>39x55   |              |              |              |
| 25                                       | 32x46            | 33x59<br>35x55     | 39x59<br>41.5x55 |              |              |              |
| 30                                       | 29.5x59<br>31x55 | 36x59<br>38x55     |                  |              |              |              |
| 33                                       | 31x59<br>32.5x55 | 37.5x59<br>39.5x55 |                  |              |              |              |
| 35                                       | →                | 38.5x59<br>41x55   |                  |              |              |              |
| 40                                       | 33.5x59<br>36x55 | 41x59              |                  |              |              |              |
| 50                                       | 37x59<br>40x55   |                    |                  |              |              |              |
| 60                                       | 40x59            |                    |                  |              |              |              |

Convert to inches, divide by 25.4

DxL(mm)



| D           | d   |
|-------------|-----|
| ≤14         | 0.8 |
| 14 < D ≤ 23 | 1.0 |
| >23         | 1.2 |

## STANDARD PART LISTING

| Capacitance (µF) | VVDC | IC <sup>®</sup> PART NUMBER | dv/dt (V/µs) | Maximum RMS Current @100 kHz, +70°C in Amps | Typical ESR @100 kHz, +25°C in mΩ | Dimensions DxL (mm) |
|------------------|------|-----------------------------|--------------|---|-----------------------------------|---------------------|
| 0.1              | 850  | 104PHC850KG                 | 375          | 3.5   | 12.9                              | 11.5x29             |
| 0.15             | 850  | 154PHC850K                  | 300          | 4.5   | 10.8                              | 12x34               |
| 0.15             | 850  | 154PHC850KG                 | 375          | 4.5   | 9.8                               | 13x29               |
| 0.22             | 700  | 224PHC700KJ                 | 105          | 3.5   | 11.0                              | 11.5x34             |
| 0.22             | 700  | 224PHC700KG                 | 135          | 3.5   | 10.2                              | 12.5x29             |
| 0.22             | 850  | 224PHC850K                  | 300          | 5.5   | 8.4                               | 13.5x34             |
| 0.22             | 850  | 224PHC850KG                 | 375          | 5.5   | 7.7                               | 15x29               |
| 0.33             | 600  | 334PHC600KG                 | 95           | 4   | 9.0                               | 12x29               |
| 0.33             | 700  | 334PHC700KJ                 | 105          | 4.5   | 8.9                               | 13.5x34             |
| 0.33             | 700  | 334PHC700KG                 | 135          | 4.5   | 8.1                               | 15x29               |
| 0.33             | 850  | 334PHC850K                  | 300          | 7   | 6.6                               | 16x34               |
| 0.33             | 850  | 334PHC850KG                 | 375          | 7   | 5.9                               | 17.5x29             |
| 0.47             | 400  | 474PHC400K                  | 75           | 4   | 8.2                               | 11x29               |
| 0.47             | 600  | 474PHC600K                  | 75           | 5   | 8.9                               | 12.5x34             |
| 0.47             | 600  | 474PHC600KG                 | 95           | 5   | 7.9                               | 13.5x29             |
| 0.47             | 700  | 474PHC700KG                 | 105          | 6.5   | 7.3                               | 15.5x34             |
| 0.47             | 700  | 474PHC700K                  | 135          | 6.5   | 6.6                               | 17x29               |
| 0.47             | 850  | 474PHC850K                  | 300          | 9   | 5.4                               | 18.5x34             |
| 0.68             | 330  | 684PHC330KG                 | 60           | 4.5   | 8.7                               | 11x29               |
| 0.68             | 400  | 684PHC400K                  | 55           | 5.5   | 8.5                               | 12x34               |
| 0.68             | 400  | 684PHC400KG                 | 75           | 5.5   | 6.7                               | 13x29               |
| 0.68             | 600  | 684PHC600K                  | 75           | 6   | 7.4                               | 14x34               |
| 0.68             | 600  | 684PHC600KG                 | 95           | 6   | 6.5                               | 16x29               |
| 0.68             | 700  | 684PHC700K                  | 105          | 8   | 5.7                               | 17.5x34             |
| 0.68             | 850  | 684PHC850KN                 | 200          | 9   | 5.4                               | 18x46               |
| 0.68             | 850  | 684PHC850K                  | 300          | 9   | 4.3                               | 21.5x34             |
| 1                | 250  | 105PHC250K                  | 50           | 4.5   | 7.2                               | 11x29               |
| 1                | 330  | 105PHC330KG                 | 60           | 5.5   | 6.6                               | 12.5x29             |
| 1                | 400  | 105PHC400K                  | 55           | 6   | 6.4                               | 13x34               |
| 1                | 400  | 105PHC400KG                 | 75           | 6   | 5.5                               | 15x29               |
| 1                | 600  | 105PHC600K                  | 75           | 8   | 5.8                               | 17.5x34             |
| 1                | 700  | 105PHC700KN                 | 70           | 9   | 6.3                               | 18x46               |
| 1                | 700  | 105PHC700K                  | 150          | 9   | 4.3                               | 21.5x34             |
| 1                | 850  | 105PHC850K                  | 200          | 9   | 4.3                               | 21.5x46             |
| 1                | 850  | 105PHC850KJ                 | 300          | 12  | 3.2                               | 26x34               |
| 1.2              | 700  | 125PHC700KN                 | 70           | 9   | 6.0                               | 20x46               |
| 1.2              | 700  | 125PHC700K                  | 105          | 9   | 3.7                               | 24x34               |
| 1.5              | 250  | 155PHC250K                  | 50           | 5   | 5.8                               | 13x29               |
| 1.5              | 330  | 155PHC330KJ                 | 45           | 6   | 6.0                               | 13.5x34             |
| 1.5              | 330  | 155PHC330KG                 | 60           | 6.5   | 5.3                               | 15x29               |
| 1.5              | 400  | 155PHC400K                  | 55           | 7   | 5.3                               | 15.5x34             |
| 1.5              | 400  | 155PHC400KG                 | 75           | 7   | 4.5                               | 17.5x29             |
| 1.5              | 600  | 155PHC600K                  | 75           | 9   | 4.7                               | 20x34               |
| 1.5              | 700  | 155PHC700K                  | 70           | 9   | 5.3                               | 21.5x46             |
| 1.5              | 850  | 155PHC850K                  | 200          | 12  | 3.5                               | 25.5x46             |
| 2                | 250  | 205PHC250KG                 | 40           | 5   | 5.7                               | 12.5x34             |
| 2                | 250  | 205PHC250K                  | 50           | 5.5   | 4.9                               | 14.5x29             |

| Capacitance (µF) | VVDC | IC <sup>®</sup> PART NUMBER | dv/dt (V/µs) | Maximum RMS Current @100 kHz, +70°C in Amps | Typical ESR @100 kHz, +25°C in mΩ | Dimensions DxL (mm) |
|------------------|------|-----------------------------|--------------|---|-----------------------------------|---------------------|
| 2                | 330  | 205PHC330KJ                 | 45           | 7.0   | 4.5                               | 15x34               |
| 2                | 330  | 205PHC330KG                 | 60           | 7.0   | 4.5                               | 16.5x29             |
| 2                | 400  | 205PHC400K                  | 55           | 9.0   | 4.4                               | 17.5x34             |
| 2                | 600  | 205PHC600KJ                 | 75           | 9.0   | 3.9                               | 23x34               |
| 2                | 600  | 205PHC600K                  | 70           | 12.0  | 4.5                               | 24.5x46             |
| 2                | 700  | 205PHC700K                  | 70           | 12.0  | 4.6                               | 22.5x46             |
| 2                | 850  | 205PHC850K                  | 200          | 12.0  | 2.9                               | 29x46               |
| 2.2              | 250  | 225PHC250K                  | 40           | 6.0   | 5.4                               | 13x34               |
| 2.2              | 250  | 225PHC250KG                 | 50           | 6.5   | 4.8                               | 15x29               |
| 2.2              | 330  | 225PHC330KJ                 | 45           | 7.0   | 5.1                               | 15.5x34             |
| 2.2              | 330  | 225PHC330KG                 | 60           | 7.0   | 4.1                               | 17.5x29             |
| 2.2              | 400  | 225PHC400K                  | 55           | 9.0   | 4.2                               | 18.5x34             |
| 2.2              | 600  | 225PHC600K                  | 55           | 9.0   | 4.6                               | 21x46               |
| 2.2              | 600  | 225PHC600KJ                 | 75           | 9.0   | 3.6                               | 24x34               |
| 2.2              | 700  | 225PHC700K                  | 70           | 12.0  | 4.3                               | 25.5x46             |
| 2.2              | 850  | 225PHC850KS                 | 110          | 12.0  | 4.3                               | 25x59               |
| 2.2              | 850  | 225PHC850KR                 | 125          | 12.0  | 3.8                               | 26.5x55             |
| 2.2              | 850  | 225PHC850KS                 | 200          | 12.0  | 2.9                               | 30x46               |
| 2.5              | 250  | 255PHC250K                  | 40           | 7.0   | 5.1                               | 14x34               |
| 2.5              | 250  | 255PHC250KG                 | 50           | 7.0   | 4.5                               | 15.5x29             |
| 2.5              | 330  | 255PHC330KJ                 | 45           | 8.0   | 4.8                               | 16.5x34             |
| 2.5              | 400  | 255PHC400K                  | 55           | 9.0   | 4.0                               | 19x34               |
| 2.5              | 600  | 255PHC600K                  | 55           | 9.0   | 4.4                               | 22x46               |
| 2.5              | 700  | 255PHC700K                  | 70           | 12.0  | 4.0                               | 27x46               |
| 2.5              | 850  | 255PHC850KS                 | 110          | 12.0  | 4.1                               | 28.5x59             |
| 2.5              | 850  | 255PHC850KR                 | 125          | 12.0  | 3.6                               | 28x55               |
| 2.5              | 850  | 255PHC850K                  | 200          | 12.0  | 2.7                               | 32x46               |
| 3                | 250  | 305PHC250K                  | 40           | 7.0   | 4.6                               | 15x34               |
| 3                | 250  | 305PHC250KG                 | 50           | 7.0   | 4.2                               | 17x29               |
| 3                | 330  | 305PHC330KJ                 | 45           | 9.0   | 4.2                               | 18.5x34             |
| 3                | 400  | 305PHC400K                  | 55           | 9.0   | 3.6                               | 21x34               |
| 3                | 600  | 305PHC600K                  | 55           | 9.0   | 4.0                               | 24x46               |
| 3                | 700  | 305PHC700K                  | 70           | 12.0  | 6.1                               | 27x44               |
| 3                | 850  | 305PHC850KS                 | 110          | 12.0  | 3.6                               | 29x59               |
| 3                | 850  | 305PHC850KR                 | 125          | 12.0  | 3.2                               | 30.5x55             |
| 3                | 850  | 305PHC850K                  | 200          | 12.0  | 2.4                               | 34.5x46             |
| 3.3              | 250  | 335PHC250K                  | 40           | 7.0   | 4.2                               | 15.5x34             |
| 3.3              | 330  | 335PHC330KJ                 | 45           | 9.0   | 4.1                               | 19x34               |
| 3.3              | 400  | 335PHC400KN                 | 40           | 9.0   | 4.1                               | 19x46               |
| 3.3              | 400  | 335PHC400K                  | 55           | 9.0   | 3.5                               | 22x34               |
| 3.3              | 600  | 335PHC600K                  | 55           | 9.0   | 3.8                               | 25x46               |
| 3.3              | 700  | 335PHC700K                  | 70           | 12.0  | 5.9                               | 30.5x46             |
| 3.3              | 850  | 335PHC850KS                 | 110          | 12.0  | 3.5                               | 30x59               |
| 3.3              | 850  | 335PHC850K                  | 125          | 12.0  | 3.1                               | 32x56               |
| 4                | 250  | 405PHC250K                  | 40           | 9.0   | 3.6                               | 17x34               |
| 4                | 330  | 405PHC330KJ                 | 45           | 9.0   | 3.6                               | 20.5x34             |
| 4                | 400  | 405PHC400K                  | 40           | 9.0   | 3.7                               | 20.5x46             |

## STANDARD PART LISTING

| Capacitance (µF) | VVDC | IC PART NUMBER | dv/dt (v/µs) | Maximum RMS Current @100 kHz, +70°C in Amps | Typical ESR @100 kHz, +25°C in mΩ | Dimensions DxL (mm) |
|------------------|------|----------------|--------------|---|-----------------------------------|---------------------|
| 4                | 400  | 405PHC400KJ    | 55           | 9   | 3.1                               | 24x34               |
| 4                | 600  | 405PHC600K     | 55           | 12  | 3.4                               | 27x46               |
| 4                | 700  | 405PHC700K     | 70           | 12  | 5.4                               | 33.5x46             |
| 4                | 700  | 405PHC700KR    | 60           | 12  | 6.7                               | 29x55               |
| 4                | 700  | 405PHC700KS    | 45           | 12  | 7.7                               | 27.5x57             |
| 4                | 850  | 405PHC850K     | 125          | 12  | 2.8                               | 35x55               |
| 4                | 850  | 405PHC850KS    | 110          | 12  | 3.1                               | 33x59               |
| 4                | 850  | 405PHC850KJ    | 40           | 9   | 3.3                               | 31x57               |
| 4.7              | 250  | 475PHC250KJ    | 40           | 9   | 3.3                               | 18x34               |
| 4.7              | 330  | 475PHC330KN    | 30           | 9   | 4.0                               | 19x46               |
| 4.7              | 330  | 475PHC330KJ    | 45           | 9   | 3.1                               | 22x34               |
| 4.7              | 400  | 475PHC400K     | 40           | 9   | 7.7                               | 22x46               |
| 4.7              | 600  | 475PHC600KS    | 40           | 12  | 8.6                               | 24.5x59             |
| 4.7              | 600  | 475PHC600KR    | 50           | 12  | 7.7                               | 26.5x55             |
| 4.7              | 600  | 475PHC600K     | 55           | 12  | 6.4                               | 29x46               |
| 4.7              | 700  | 475PHC700KS    | 45           | 12  | 7.0                               | 29.5x59             |
| 4.7              | 700  | 475PHC700K     | 60           | 12  | 6.1                               | 31x55               |
| 4.7              | 850  | 475PHC850KS    | 110          | 12  | 2.8                               | 35.5x59             |
| 4.7              | 850  | 475PHC850K     | 125          | 12  | 2.5                               | 37x55               |
| 5                | 250  | 505PHC250K     | 40           | 9   | 3.2                               | 18.5x34             |
| 5                | 330  | 505PHC330KN    | 30           | 9   | 3.9                               | 19.5x46             |
| 5                | 330  | 505PHC330KJ    | 45           | 9   | 3.0                               | 21.5x34             |
| 5                | 400  | 505PHC400K     | 40           | 9   | 7.5                               | 22.5x46             |
| 5                | 600  | 505PHC600KS    | 40           | 11.5  | 8.3                               | 25x59               |
| 5                | 600  | 505PHC600K     | 50           | 12  | 7.4                               | 27x55               |
| 5                | 600  | 505PHC600KN    | 55           | 12  | 6.3                               | 29.5x46             |
| 5                | 700  | 505PHC700KS    | 45           | 12  | 6.6                               | 30.5x59             |
| 5                | 700  | 505PHC700K     | 60           | 12  | 5.8                               | 32x55               |
| 5                | 850  | 505PHC850KS    | 110          | 12  | 2.7                               | 36.5x59             |
| 5                | 850  | 505PHC850K     | 125          | 12  | 2.4                               | 38x55               |
| 5.6              | 850  | 565PHC850K     | 125          | 12  | 2.1                               | 40.5x55             |
| 6.8              | 250  | 685PHC250K     | 40           | 9   | 2.9                               | 21x34               |
| 6.8              | 330  | 685PHC330KN    | 30           | 9   | 3.4                               | 22x46               |
| 6.8              | 400  | 685PHC400K     | 40           | 11  | 6.4                               | 26x46               |
| 6.8              | 600  | 685PHC600KS    | 40           | 12  | 7.3                               | 28.5x59             |
| 6.8              | 600  | 685PHC600K     | 50           | 12  | 6.5                               | 30x55               |
| 6.8              | 700  | 685PHC700KS    | 45           | 12  | 5.8                               | 35x59               |
| 6.8              | 700  | 685PHC700K     | 60           | 12  | 5.1                               | 37x55               |
| 6.8              | 850  | 685PHC850KS    | 110          | 12  | 2.3                               | 41.5x59             |
| 8.2              | 700  | 825PHC700KS    | 45           | 12  | 5.3                               | 38x59               |
| 8.2              | 700  | 825PHC700K     | 60           | 12  | 4.6                               | 41x55               |
| 10               | 250  | 106PHC250KN    | 25           | 9   | 3.1                               | 21.5x46             |
| 10               | 250  | 106PHC250K     | 40           | 9   | 2.4                               | 24x34               |
| 10               | 330  | 106PHC330KN    | 30           | 10  | 6.7                               | 26x46               |
| 10               | 400  | 106PHC400KS    | 25           | 11  | 7.1                               | 26x59               |

| Capacitance (µF) | VVDC | IC PART NUMBER | dv/dt (v/µs) | Maximum RMS Current @100 kHz, +70°C in Amps | Typical ESR @100 kHz, +25°C in mΩ | Dimensions DxL (mm) |
|------------------|------|----------------|--------------|---|-----------------------------------|---------------------|
| 10               | 400  | 106PHC400KON   | 40           | 12  | 5.4                               | 31x46               |
| 10               | 400  | 106PHC400K     | 30           | 12  | 6.3                               | 27x55               |
| 10               | 600  | 106PHC600KS    | 40           | 12  | 6.1                               | 33.5x59             |
| 10               | 600  | 106PHC600K     | 50           | 12  | 5.4                               | 35x55               |
| 10               | 700  | 106PHC700KS    | 45           | 12  | 4.9                               | 41.5x59             |
| 12.5             | 600  | 126PHC600KS    | 40           | 12  | 5.5                               | 37.5x59             |
| 12.5             | 600  | 126PHC600K     | 50           | 12  | 4.9                               | 40.5x55             |
| 15               | 250  | 156PHC250K     | 25           | 12  | 2.6                               | 25.5x46             |
| 15               | 330  | 156PHC330KS    | 20           | 12  | 6.8                               | 26.5x59             |
| 15               | 330  | 156PHC330KR    | 25           | 12  | 6.0                               | 28x55               |
| 15               | 330  | 156PHC330KN    | 30           | 12  | 5.4                               | 31x46               |
| 15               | 400  | 156PHC400KS    | 25           | 12  | 5.6                               | 31x59               |
| 15               | 400  | 156PHC400K     | 30           | 12  | 5.0                               | 33x55               |
| 15               | 600  | 156PHC600KS    | 40           | 12  | 5.1                               | 41x59               |
| 20               | 250  | 206PHC250K     | 25           | 12  | 5.0                               | 29x46               |
| 20               | 330  | 206PHC330KS    | 20           | 12  | 5.8                               | 30x59               |
| 20               | 330  | 206PHC330KR    | 25           | 12  | 5.1                               | 31.5x55             |
| 20               | 400  | 206PHC400KS    | 25           | 12  | 4.7                               | 35x59               |
| 20               | 400  | 206PHC400K     | 30           | 12  | 4.3                               | 37x55               |
| 22               | 250  | 226PHC250KN    | 25           | 12  | 4.7                               | 30.5x46             |
| 22               | 330  | 226PHC330KS    | 20           | 12  | 5.4                               | 31x59               |
| 22               | 330  | 226PHC330KR    | 25           | 12  | 4.8                               | 33x55               |
| 22               | 400  | 226PHC400KS    | 25           | 12  | 4.5                               | 37x59               |
| 22               | 400  | 226PHC400KR    | 30           | 12  | 4.1                               | 39x55               |
| 25               | 250  | 256PHC250K     | 25           | 12  | 4.4                               | 32x46               |
| 25               | 330  | 256PHC330KS    | 20           | 12  | 5.0                               | 33x59               |
| 25               | 330  | 256PHC330KR    | 25           | 12  | 4.5                               | 35x55               |
| 25               | 400  | 256PHC400KS    | 25           | 12  | 4.2                               | 39x59               |
| 25               | 400  | 256PHC400K     | 30           | 12  | 3.8                               | 41.5x56             |
| 30               | 250  | 306PHC250KS    | 15           | 12  | 5.3                               | 29.5x59             |
| 30               | 250  | 306PHC250K     | 20           | 12  | 4.5                               | 31x55               |
| 30               | 330  | 306PHC330KS    | 20           | 12  | 4.5                               | 36x59               |
| 30               | 330  | 306PHC330KR    | 25           | 12  | 4.1                               | 38x55               |
| 33               | 250  | 336PHC250KS    | 15           | 12  | 5                                 | 31x59               |
| 33               | 250  | 336PHC250KR    | 20           | 12  | 4.3                               | 32.5x55             |
| 33               | 330  | 336PHC330KS    | 20           | 12  | 4.3                               | 37.5x59             |
| 33               | 330  | 336PHC330KR    | 25           | 12  | 3.9                               | 39.5x55             |
| 35               | 330  | 356PHC330KS    | 20           | 12  | 4.2                               | 38.5x59             |
| 35               | 330  | 356PHC330KR    | 25           | 12  | 3.8                               | 41x55               |
| 40               | 250  | 406PHC250KS    | 15           | 12  | 4.5                               | 33.5x59             |
| 40               | 250  | 406PHC250K     | 20           | 12  | 3.9                               | 36x55               |
| 40               | 330  | 406PHC330KS    | 20           | 12  | 3.9                               | 41x59               |
| 50               | 250  | 506PHC250KS    | 15           | 12  | 3.9                               | 37x59               |
| 50               | 250  | 506PHC250K     | 20           | 12  | 3.5                               | 40x55               |
| 60               | 250  | 606PHC250KS    | 15           | 12  | 3.5                               | 40x59               |