



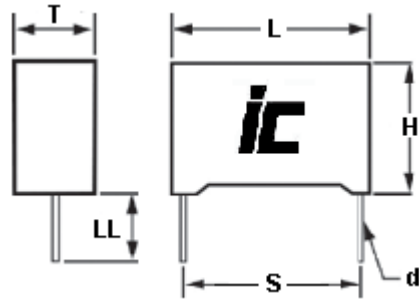
#### FEATURES

High Pulse Currents - High voltage

#### APPLICATIONS

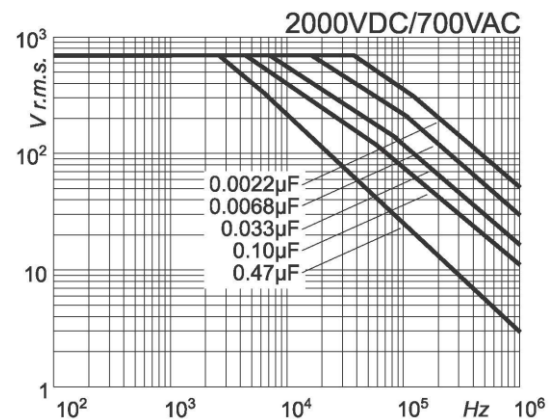
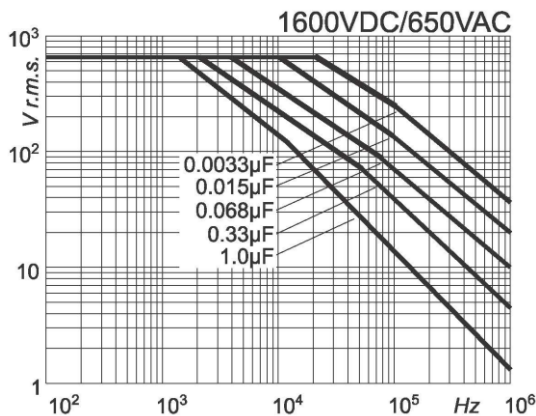
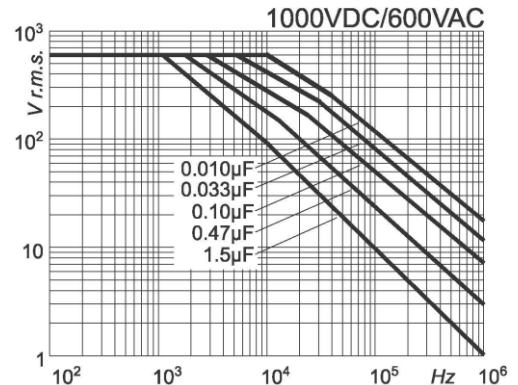
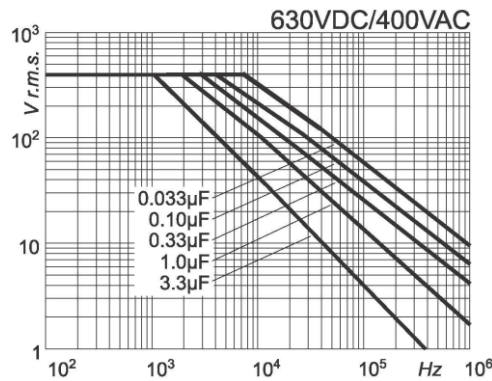
Power Semiconductor Circuits - SCR Commutation -  
Ballasts Controls - Switching Power Supplies

|   |   |   |             |       |      |
|---|---|---|-------------|-------|------|
| Operating Temperature Range   | <b>-55°C to +105°C</b>  |   |             |       |      |
| Capacitance Tolerance   | ±10% at 1 kHz, 25°C<br>+5% optional   |   |             |       |      |
| AC voltage (50/60 Hz)   | WVDC  | 630   | 1000        | 1600  | 2000 |
|   | VAC   | 400   | 630         | 650   | 700  |
|   | DC: For T>+85°C, The voltage must be decreased by 1.5% per °C<br>AC: For T>+75°C, The voltage must be decreased by 1.75% per °C |   |             |       |      |
| Dissipation Factor (MAX)<br>25°C  | Frequency (kHz)   | C≤0.1uF   | 0.1uF<C≤1uF | C>1uF |      |
|   | 1   | 0.04%   | 0.04%       | 0.05% |      |
|   | 10  | 0.05%   | 0.06%       | -     |      |
|   | 100   | 0.16%   | -           | -     |      |
| Insulation Resistance<br>@25°C (<70% RH) for 1 minute at<br>100VDC applied                  | Capacitance   | Insulation Resistance   |             |       |      |
|   | ≤0.33μF   | 100000 MΩ   |             |       |      |
|   | >0.33μF   | 30000 MΩμF  |             |       |      |
| Self Inductance   | <1 nano-Henry per mm of lead spacing  |   |             |       |      |
| Capacitance Drift Factor  | <0.5% after 2 years at 40°C   |   |             |       |      |
| Load Life   | <b>2000 Hours, +85C with 125% of rated voltage</b>  |   |             |       |      |
|   | Capacitance Change  | ≤1% of initially measured value   |             |       |      |
|   | Dissipation Factor  | ≤0.001 at 10kHz and 25°C for C≤1uF<br>≤0.001 at 1kHz and 25°C for C>1uF |             |       |      |
|   | Insulation Resistance   | ≥50% of maximum specified value   |             |       |      |
| Reliability<br>(0.5xRated Voltage,<br>40°C)<br>1 FIT=1 failure/1 billion<br>component hours | 1 Fit   |   |             |       |      |
|   | Capacitance Change  | ≤10% of initially measured value  |             |       |      |
|   | Dissipation Factor  | ≤200% of initially specified value                                      |             |       |      |
|   | Insulation Resistance   | ≥50% of maximum specified value   |             |       |      |
| Damp Heat test  | <b>56 days at 40°C with 90 to 95%RH, +40°C and no voltage applied</b>   |   |             |       |      |
|   | Capacitance Change  | ≤5% of initially measured value   |             |       |      |
|   | Dissipation Factor  | ≤0.005 at 1kHz and 25°C   |             |       |      |
|   | Insulation Resistance   | ≥50% of maximum specified value   |             |       |      |
| Self Inductance   | <1 nano-Henry per mm of lead spacing  |   |             |       |      |
| Capacitance Drift Factor  | <0.5% after 2 years at 40°C   |   |             |       |      |
| Capacitance Temperature Coefficient   | -200 ppm/°C, ±100ppm/°C   |   |             |       |      |
| Dielectric Strength   | <b>Terminal to Terminal</b>   |   |             |       |      |
|   | 160% of rated VDC applied for 2 Seconds and 25°C  |   |             |       |      |
| Dielectric  | Polypropylene   |   |             |       |      |
| Construction  | Metallized film   |   |             |       |      |
| Coating   | Flame Retardant plastic box (UL 94V-1) with epoxy resin fill (UL94V0)   |   |             |       |      |
| Leads   | Lead free tinned copper leads   |   |             |       |      |



|    |         |         |        |        |
|----|---------|---------|--------|--------|
| L  | 18      | 26.5    | 32     | 42.5   |
| S  | 15      | 22.5    | 27.5   | 37.5   |
| d  | 0.8     | 0.8     | 0.8    | 1.2    |
| LL | 5.0±1.0 | 5.0±1.0 | 30±5.0 | 30±5.0 |

Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C  
Not for across the line applications



# PPR

## High Voltage Pulse Radial Lead Snubber

| Capacitance (μF) | WVDC | IC PART NUMBER | dv/dt (v/μ sec.) | Dims LxHxT (mm) | S (MM) | d (MM) |
|------------------|------|----------------|------------------|-----------------|--------|--------|
| 0.0022           | 2000 | 222PPR202KE    | 7000             | 18x11x5         | 15     | 0.8    |
| 0.0033           | 1600 | 332PPR162KE    | 6000             | 18x11x5         | 15     | 0.8    |
| 0.0033           | 2000 | 332PPR202KE    | 7000             | 18x12x6         | 15     | 0.8    |
| 0.0047           | 1600 | 472PPR162KE    | 6000             | 18x11x5         | 15     | 0.8    |
| 0.0047           | 2000 | 472PPR202KE    | 7000             | 18x13.5x7.5     | 15     | 0.8    |
| 0.0068           | 1600 | 682PPR162KE    | 6000             | 18x11x5         | 15     | 0.8    |
| 0.0068           | 2000 | 682PPR202KE    | 7000             | 18x13.5x7.5     | 15     | 0.8    |
| 0.01             | 1000 | 103PPR102KE    | 3300             | 18x11x5         | 15     | 0.8    |
| 0.01             | 1600 | 103PPR162KE    | 6000             | 18x12x6         | 15     | 0.8    |
| 0.01             | 2000 | 103PPR202KE    | 7000             | 18x16x10        | 15     | 0.8    |
| 0.01             | 2000 | 103PPR202KG    | 3500             | 26.5x15x6       | 22.5   | 0.8    |
| 0.015            | 1000 | 153PPR102KE    | 3300             | 18x12x6         | 15     | 0.8    |
| 0.015            | 1600 | 153PPR162KE    | 6000             | 18x13.5x7.5     | 15     | 0.8    |
| 0.015            | 2000 | 153PPR202KG    | 3500             | 26.5x16x7       | 22.5   | 0.8    |
| 0.022            | 630  | 223PPR630KE    | 2500             | 18x11x5         | 15     | 0.8    |
| 0.022            | 1000 | 223PPR102KE    | 3300             | 18x13.5x7.5     | 15     | 0.8    |
| 0.022            | 1600 | 223PPR162KE    | 6000             | 18x14.5x8.5     | 15     | 0.8    |
| 0.022            | 1600 | 223PPR162KG    | 3000             | 26.5x15x6       | 22.5   | 0.8    |
| 0.022            | 2000 | 223PPR202KG    | 3500             | 26.5x17x8.5     | 22.5   | 0.8    |
| 0.022            | 2000 | 223PPR202KH    | 2300             | 32x17x9         | 27.5   | 0.8    |
| 0.033            | 630  | 333PPR630KE    | 2500             | 18x12x6         | 15     | 0.8    |
| 0.033            | 1000 | 333PPR102KE    | 3300             | 18x14.5x8.5     | 15     | 0.8    |
| 0.033            | 1000 | 333PPR102KG    | 2100             | 26.5x15x6       | 22.5   | 0.8    |
| 0.033            | 1600 | 333PPR162KG    | 3000             | 26.5x16x7       | 22.5   | 0.8    |
| 0.033            | 2000 | 333PPR202KG    | 3500             | 26.5x18.5x10    | 22.5   | 0.8    |
| 0.033            | 2000 | 333PPR202KH    | 2300             | 32x17x9         | 27.5   | 0.8    |
| 0.047            | 630  | 473PPR630KE    | 2500             | 18x13.5x7.5     | 15     | 0.8    |
| 0.047            | 1000 | 473PPR102KG    | 2100             | 26.5x16x7       | 22.5   | 0.8    |
| 0.047            | 1600 | 473PPR162KG    | 3000             | 26.5x18.5x10    | 22.5   | 0.8    |
| 0.047            | 1600 | 473PPR162KH    | 2000             | 32x17x9         | 27.5   | 0.8    |
| 0.047            | 2000 | 473PPR202KG    | 3500             | 26.5x22x13      | 22.5   | 0.8    |
| 0.047            | 2000 | 473PPR202KH    | 2300             | 32x20x11        | 27.5   | 0.8    |
| 0.068            | 630  | 683PPR630KE    | 2500             | 18x14.5x8.5     | 15     | 0.8    |
| 0.068            | 630  | 683PPR630KG    | 1500             | 26.5x15x6       | 22.5   | 0.8    |
| 0.068            | 1000 | 683PPR102KG    | 2100             | 26.5x17x8.5     | 22.5   | 0.8    |
| 0.068            | 1600 | 683PPR162KG    | 3000             | 26.5x20x11      | 22.5   | 0.8    |
| 0.068            | 1600 | 683PPR162KH    | 2000             | 32x17x9         | 27.5   | 0.8    |
| 0.068            | 2000 | 683PPR202KH    | 2300             | 32x22x13        | 27.5   | 0.8    |
| 0.1              | 630  | 104PPR630KE    | 2500             | 18x16x10        | 15     | 0.8    |
| 0.1              | 630  | 104PPR630KG    | 1500             | 26.5x15x6       | 22.5   | 0.8    |
| 0.1              | 1000 | 104PPR102KH    | 1000             | 32x17x9         | 27.5   | 0.8    |
| 0.1              | 1000 | 104PPR102KG    | 2100             | 26.5x18.5x10    | 22.5   | 0.8    |
| 0.1              | 1600 | 104PPR162KG    | 3000             | 26.5x22x13      | 22.5   | 0.8    |

| Capacitance (μF) | WVDC | IC PART NUMBER | dv/dt (v/μ sec.) | Dims LxHxT (mm) | S (MM) | d (MM) |
|------------------|------|----------------|------------------|-----------------|--------|--------|
| 0.1              | 1600 | 104PPR162KH    | 2000             | 32x20x11        | 27.5   | 0.8    |
| 0.1              | 2000 | 104PPR202KH    | 2300             | 32x28x14        | 27.5   | 0.8    |
| 0.15             | 630  | 154PPR630KG    | 1500             | 26.5x17x8.5     | 22.5   | 0.8    |
| 0.15             | 630  | 154PPR630KH    | 900              | 32x17x9         | 27.5   | 0.8    |
| 0.15             | 1000 | 154PPR102KG    | 2100             | 26.5x22x13      | 22.5   | 0.8    |
| 0.15             | 1000 | 154PPR102KH    | 1000             | 32x20x11        | 27.5   | 0.8    |
| 0.15             | 1600 | 154PPR162KH    | 2000             | 32x24.5x15      | 27.5   | 0.8    |
| 0.15             | 2000 | 154PPR202KH    | 2300             | 32x33x18        | 27.5   | 0.8    |
| 0.15             | 2000 | 154PPR202KJ    | 1500             | 42.5x28x17      | 37.5   | 1      |
| 0.22             | 630  | 224PPR630KG    | 1500             | 26.5x18.5x10    | 22.5   | 0.8    |
| 0.22             | 630  | 224PPR630KH    | 900              | 32x17x9         | 27.5   | 0.8    |
| 0.22             | 1000 | 224PPR102KH    | 1000             | 32x22x13        | 27.5   | 0.8    |
| 0.22             | 1600 | 224PPR162KH    | 2000             | 32x33x18        | 27.5   | 0.8    |
| 0.22             | 2000 | 224PPR202KH    | 2300             | 32x37x22        | 27.5   | 0.8    |
| 0.22             | 2000 | 224PPR202KJ    | 1500             | 42.5x30x22      | 37.5   | 1      |
| 0.33             | 630  | 334PPR630KG    | 1500             | 26x22x13        | 22.5   | 0.8    |
| 0.33             | 630  | 334PPR630KH    | 900              | 32x20x11        | 27.5   | 0.8    |
| 0.33             | 1000 | 334PPR102KH    | 1000             | 32x28x14        | 27.5   | 0.8    |
| 0.33             | 1600 | 334PPR162KH    | 2000             | 32x33x18        | 27.5   | 0.8    |
| 0.33             | 1600 | 334PPR162KJ    | 1200             | 42.5x28x17      | 37.5   | 1      |
| 0.33             | 2000 | 334PPR202KJ    | 1500             | 42.5x37x28      | 37.5   | 1      |
| 0.47             | 630  | 474PPR630KH    | 900              | 32x22x13        | 27.5   | 0.8    |
| 0.47             | 1000 | 474PPR102KH    | 1000             | 32x33x18        | 27.5   | 0.8    |
| 0.47             | 1600 | 474PPR162KJ    | 1200             | 42.5x30x22      | 37.5   | 1      |
| 0.47             | 1600 | 474PPR162KH    | 2000             | 32x37x22        | 27.5   | 0.8    |
| 0.47             | 2000 | 474PPR202KJ    | 1500             | 42.5x37x28      | 37.5   | 1      |
| 0.56             | 2000 | 564PPR202KJ    | 1500             | 42.5x45x30      | 37.5   | 1      |
| 0.68             | 630  | 684PPR630KH    | 900              | 32x24.5x15      | 27.5   | 0.8    |
| 0.68             | 1000 | 684PPR102KH    | 1000             | 32x37x22        | 27.5   | 0.8    |
| 0.68             | 1000 | 684PPR102KJ    | 500              | 42.5x30x22      | 37.5   | 1      |
| 0.68             | 1600 | 684PPR162KJ    | 1200             | 42.5x37x28      | 37.5   | 1      |
| 1                | 630  | 105PPR630KH    | 900              | 32x33x18        | 27.5   | 0.8    |
| 1                | 630  | 105PPR630KJ    | 450              | 42.5x28x17      | 37.5   | 1      |
| 1                | 1000 | 105PPR102KJ    | 500              | 42.5x37x28      | 37.5   | 1      |
| 1                | 1600 | 105PPR162KJ    | 1200             | 42.5x45x30      | 37.5   | 1      |
| 1.5              | 630  | 155PPR630KJ    | 450              | 42.5x30x22      | 37.5   | 1      |
| 1.5              | 630  | 155PPR630KH    | 900              | 32x37x22        | 27.5   | 0.8    |
| 1.5              | 1000 | 155PPR102KJ    | 500              | 42.5x37x28      | 37.5   | 1      |
| 1.8              | 1000 | 185PPR102KJ    | 500              | 42.5x45x30      | 37.5   | 1      |
| 2.2              | 630  | 225PPR630KJ    | 450              | 42.5x37x28      | 37.5   | 1      |
| 3.3              | 630  | 335PPR630KJ    | 450              | 42.5x45x30      | 37.5   | 1      |
| 3.9              | 630  | 395PPR630KJ    | 450              | 42.5x45x30      | 37.5   | 1      |