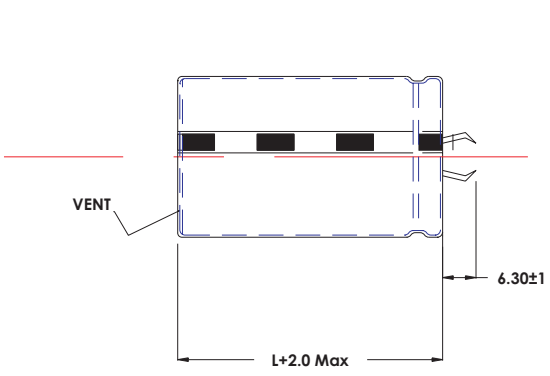
## PSS SERIES - General Purpose, 85°C

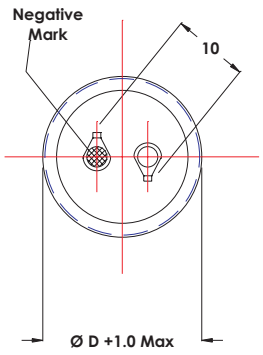
- Minimum Continuous Load Life: 2000 hours at 85°C
- For Power Supplies, Inverters, SMPS
- Snap-in Terminals
- Top Vent (in Aluminum Can) for Safety

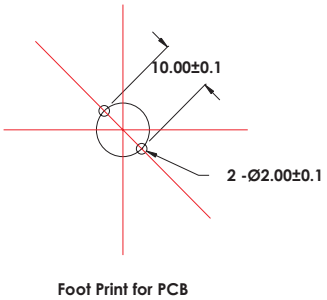
### SPECIFICATIONS

| | Parameter | Performance | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Operating Temperature Range | -25°C ~ 85°C | | | | | |
| 2 | Rated Voltage Range | 16 V to 450 V | | | | | |
| 3 | Capacitance Tolerance | ± 20% | | | | | |
| 4 | Leakage Current (Max) - Apply Rated Voltage for 5 minutes before test | I = 0.02 CV or 5 mA, whichever is smaller | | | | | |
| | | I = Leakage Current; C= Rated Capacitance; V = Rated Working Voltage | | | | | |
| 5 | Dissipation Factor (%, max at 100 Hz) | Vdc | 16 | 25-35 | 50-100 | 160-400 | 450 |
| | | Max Rating (%) | 35 | 30 | 20 | 20 | 20 |
| 6 | Temperature Characteristics Impedance Ratio (max) | Vdc | 16 | 25-35 | 50-100 | 160-400 | 450 |
| | | $Z_{-25°C}/Z_{20°C}$ | 4 | 3 | 2 | 4 | 8 |
| 7 | Endurance | After 2000 Hours Life at 85°C with Rated Voltage and Ripple Current the DUT will meet the following conditions | | | | | |
| | | Capacitance Change | Within + 20% of initial value | | | | |
| | | Leakage Current | Less than the specified value | | | | |
| | | Dissipation Factor | Less than 200% of specified value | | | | |
| 8 | Shelf Life | After 1000 Hours Shelf Life at 85° C and thereafter pre-treatment as per IEC 384-1 the DUT will meet the following conditions | | | | | |
| | | Capacitance Change | Within + 20% of initial value | | | | |
| | | Leakage Current | Less than the specified value | | | | |
| | | Dissipation Factor | Less than 200% of specified value | | | | |
| 9 | Other Details | As per IEC 384-4 | | | | | |

## Dimensions and PCB Footprint




All Dimensions are in mm

## PSS Series Selection Guide: Can Sizes and Ripple Current Ratings

| Vdc / μF | 16V | | 25V | | 35V | | 50V | | 63V | | 100V | | 160V | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple |
| 47 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 150 | | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | |
| 330 | | | | | | | | | | | | | | |
| 470 | | | | | | | | | | | | | 22x30 | 1.70 |
| 1000 | | | | | | | | | | | 22x25 | 1.85 | 22x50 | 2.80 |
| 1500 | | | | | | | | | | | 25x30 | 2.40 | 25x50 | 3.70 |
| 2200 | | | | | | | | | | | 25x40 | 3.10 | 35x50 | 4.85 |
| 3300 | | | | | 22x25 | 2.10 | 22x30 | 2.35 | 22x30 | 2.55 | 25x50 | 4.05 | | |
| 4700 | | | 22x25 | 2.05 | 22x30 | 2.40 | 22x40 | 3.00 | 22x50 | 3.40 | 30x50 | 5.10 | | |
| 6800 | | | 22x30 | 2.35 | 22x40 | 2.80 | 22x50 | 3.80 | 25x50 | 4.25 | 35x50 | 6.45 | | |
| 10000 | 22x25 | 2.75 | 22x40 | 3.05 | 22x50 | 3.55 | 30x50 | 5.00 | 30x50 | 5.45 | 35x56 | 6.75 | | |
| 15000 | 22x40 | 3.25 | 25x40 | 3.95 | 25x50 | 4.55 | 35x50 | 6.45 | 35x56 | 6.65 | | | | |
| 22000 | 22x50 | 4.35 | 25x50 | 4.95 | 30x50 | 5.35 | | | | | | | | |
| 33000 | | | | | | | | | | | | | | |
| 47000 | | | | | | | | | | | | | | |

| Vdc / μF | 200V | | 250V | | 315V | | 350V | | 400V | | 450V | | 500V | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple | DxL | Ripple |
| 47 | | | | | | | | | | | 22x25 | 0.60 | 22x40 | 0.65 |
| 100 | | | | | 22x25 | 0.85 | 22x25 | 0.80 | 22x30 | 0.80 | 22x40 | 0.90 | 25x40 | 0.95 |
| 150 | | | | | 22x30 | 1.10 | 22x40 | 1.15 | 22x40 | 1.05 | 22x50 | 1.05 | 25x50 | 1.10 |
| 220 | | | 22x25 | 1.10 | 22x40 | 1.40 | 22x50 | 1.45 | 25x40 | 1.35 | 25x50 | 1.50 | 30x50 | 1.60 |
| 330 | 22x30 | 1.45 | 25x30 | 1.50 | 22x50 | 1.75 | 25x50 | 1.80 | 25x50 | 1.75 | 30x50 | 1.90 | 35x50 | 2.05 |
| 470 | 22x40 | 1.75 | 25x40 | 1.85 | 25x50 | 2.15 | 30x50 | 2.35 | 30x50 | 2.30 | 35x50 | 2.40 | | |
| 1000 | 25x50 | 2.90 | 30x50 | 3.30 | 35x50 | 3.65 | | | | | | | | |
| 1500 | 30x50 | 3.80 | 35x50 | 4.00 | | | | | | | | | | |
| 2200 | 35x50 | 4.90 | | | | | | | | | | | | |
| 3300 | | | | | | | | | | | | | | |
| 4700 | | | | | | | | | | | | | | |
| 6800 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 15000 | | | | | | | | | | | | | | |
| 22000 | | | | | | | | | | | | | | |
| 33000 | | | | | | | | | | | | | | |
| 47000 | | | | | | | | | | | | | | |

### Mulitpliers Table for Ripple Current Specification

| Parameter | 50 Hz | 100 Hz | 1K Hz | 10K Hz | 105°C | 85°C | 65°C |
|---|---|---|---|---|---|---|---|
| Coefficient | 0.8 | 1.0 | 1.3 | 1.5 | 1.0 | 1.7 | 2.1 |

Abbreviations Used:- D: Diameter of Aluminum Case in mm, L: Length of Aluminum Case in mm
Ripple Current: Maximum Rating, in Amperes at rated Operating Temperature and rated Maximum Operating Voltage