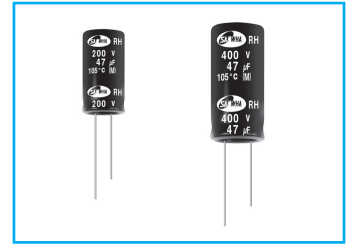
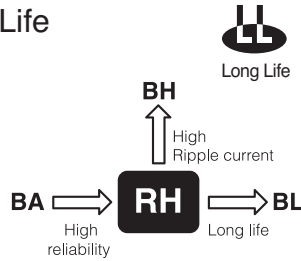


## RH For PSU High Ripple Current, Long Life Series

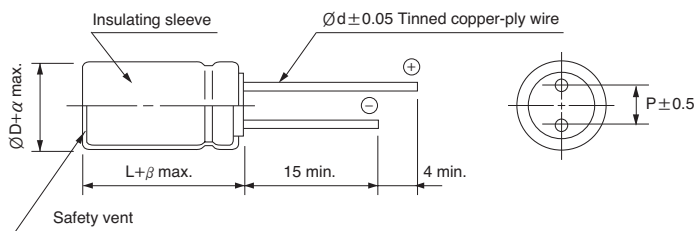
- High ripple current
- High reliability withstanding 5000 hours load life at 105°C
- Suited for ballast application
- Complied to the RoHS directive



| Item   | Characteristics  |                                   |      |              |      |             |      |      |
|--|--|-----------------------------------|------|--------------|------|-------------|------|------|
| Operating temperature range                                | WV   | 160 ~ 250                         |      | 350 ~ 450    |      | 500         |      |      |
|  | Temperature range  | -40 ~ +105°C                      |      | -40 ~ +105°C |      | -25 ~ 105°C |      |      |
| Leakage current max.                                       | I = 0.02CV + 15µA (after 5 minutes)  |                                   |      |              |      |             |      |      |
| Capacitance tolerance                                      | ±20% at 120Hz, 20°C  |                                   |      |              |      |             |      |      |
| Dissipation factor max. (at 120Hz, 20°C)                   | WV   | 160                               | 200  | 250          | 350  | 400         | 450  | 500  |
|  | tanδ   | 0.15                              | 0.15 | 0.15         | 0.20 | 0.24        | 0.24 | 0.24 |
| Low temperature characteristics (Impedance ratio at 120Hz) | WV   | 160                               | 200  | 250          | 350  | 400         | 450  | 500  |
|  | Z-25°C/Z+20°C  | 3                                 | 3    | 3            | 4    | 6           | 6    | 6    |
|  | Z-40°C/Z+20°C  | 4                                 | 4    | 4            | 8    | 10          | 10   | -    |
| Load life  | After an application of DC bias voltage plus the rated AC ripple current for 5000 hours at 105°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage. |                                   |      |              |      |             |      |      |
|  | Leakage current  | Less than specified value         |      |              |      |             |      |      |
|  | Capacitance change   | Within ±20% of initial value      |      |              |      |             |      |      |
|  | tanδ   | Less than 200% of specified value |      |              |      |             |      |      |
| Shelf life (at 105°C)                                      | After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C 6035 clause 5.4.  |                                   |      |              |      |             |      |      |

### ● DRAWING

Unit : mm



| ØD | 10  | 12.5 | 16  | 18  | 20   | 22   |
|----|-----|------|-----|-----|------|------|
| P  | 5.0 | 5.0  | 7.5 | 7.5 | 10.0 | 10.0 |
| Ød | 0.6 | 0.6  | 0.8 | 0.8 | 0.8  | 1.0  |
| β  | 2.0 |      |     |     | 3.0  |      |
| α  | 0.5 |      |     |     | 1.0  |      |

### ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

| µF       | Frequency | 60Hz | 120Hz | 1kHz | 10kHz | 50kHz | 100kHz ≤ |
|----------|-----------|------|-------|------|-------|-------|----------|
| ~ 4.7    |           | 0.25 | 0.30  | 0.60 | 0.80  | 0.90  | 1.00     |
| 6.8 ~ 10 |           | 0.30 | 0.40  | 0.70 | 0.90  | 0.95  | 1.00     |
| 22 ~     |           | 0.40 | 0.50  | 0.80 | 0.90  | 0.95  | 1.00     |

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**RH** series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

| $\mu\text{F}$ \diagdown WV | 160       |      | 200       |      | 250       |      | 350       |      |
|----------------------------|-----------|------|-----------|------|-----------|------|-----------|------|
| 1.0                        |           |      |           |      |           |      | 10 × 12.5 | 80   |
| 2.2                        |           |      |           |      |           |      | 10 × 12.5 | 90   |
| 3.3                        |           |      |           |      |           |      | 10 × 12.5 | 100  |
|                            |           |      |           |      |           |      | 10 × 16   | 130  |
| 4.7                        |           |      |           |      |           |      | 10 × 16   | 200  |
| 6.8                        |           |      | 10 × 12.5 | 120  | 10 × 12.5 | 120  | 10 × 16   | 200  |
| 10                         | 10 × 16   | 250  | 10 × 16   | 300  | 10 × 20   | 300  | 10 × 16   | 280  |
| 22                         | 10 × 16   | 360  | 10 × 16   | 360  | 12.5 × 20 | 600  | 12.5 × 20 | 350  |
|                            | 10 × 20   | 500  | 10 × 20   | 500  |           |      |           |      |
| 33                         | 10 × 20   | 500  | 10 × 20   | 500  | 12.5 × 20 | 600  | 16 × 20   | 500  |
|                            |           |      | 12.5 × 20 | 600  |           |      |           |      |
| 47                         | 12.5 × 20 | 600  | 12.5 × 20 | 660  | 12.5 × 25 | 720  | 16 × 25   | 660  |
| 68                         | 12.5 × 25 | 600  | 12.5 × 25 | 760  | 16 × 25   | 920  | 16 × 31.5 | 800  |
| 82                         | 16 × 20   | 760  | 16 × 20   | 880  | 16 × 25   | 1120 | 18 × 31.5 | 920  |
| 100                        | 16 × 25   | 1100 | 16 × 25   | 1120 | 16 × 31.5 | 1200 | 18 × 31.5 | 1020 |
| 120                        | 16 × 25   | 1180 | 16 × 31.5 | 1200 | 18 × 25   | 1200 | 18 × 31.5 | 1150 |
| 150                        | 16 × 31.5 | 1300 | 16 × 31.5 | 1300 | 18 × 25   | 1250 | 18 × 40   | 1250 |
|                            |           |      |           |      | 18 × 31.5 | 1250 |           |      |
| 220                        |           |      |           |      | 18 × 35.5 | 1600 |           |      |

| $\mu\text{F}$ \diagdown WV | 400       |      | 450       |      | 500       |      |
|----------------------------|-----------|------|-----------|------|-----------|------|
| 1.0                        | 10 × 12.5 | 90   |           |      |           |      |
| 2.2                        | 10 × 12.5 | 100  | 10 × 16   | 120  |           |      |
|                            | 10 × 16   | 120  |           |      |           |      |
| 3.3                        | 10 × 16   | 140  | 10 × 16   | 140  |           |      |
| 4.7                        | 10 × 16   | 180  | 10 × 20   | 180  |           |      |
| 6.8                        | 10 × 16   | 200  | 10 × 20   | 200  |           |      |
| 10                         | 10 × 20   | 280  | 12.5 × 20 | 300  | 12.5 × 20 | 300  |
| 15                         | 12.5 × 16 | 280  |           |      |           |      |
| 22                         | 12.5 × 25 | 430  | 16 × 25   | 550  | 16 × 25   | 420  |
| 33                         | 16 × 25   | 640  | 16 × 31.5 | 700  | 16 × 31.5 | 560  |
| 47                         | 16 × 31.5 | 750  | 16 × 31.5 | 700  | 18 × 35.5 | 700  |
| 56                         |           |      | 18 × 25   | 750  | 18 × 35.5 | 740  |
| 68                         | 16 × 31.5 | 880  | 18 × 25   | 900  | 18 × 35.5 | 900  |
|                            |           |      | 18 × 31.5 | 1000 |           |      |
| 82                         | 16 × 35.5 | 1000 | 18 × 31.5 | 1035 | 18 × 40   | 1030 |
|                            |           |      | 18 × 35.5 | 1100 |           |      |
| 100                        | 18 × 35.5 | 1120 | 18 × 35.5 | 1296 | 18 × 45   | 1100 |
|                            |           |      |           |      | 20 × 41   | 1200 |
| 120                        | 18 × 40   | 1250 | 18 × 40   | 1400 |           |      |
| 150                        | 20 × 41   | 1380 | 20 × 41   | 1796 |           |      |
| 180                        | 20 × 41   | 1450 | 22 × 45   | 1800 |           |      |

↑ ↑  
 ——— Ripple current (mA rms) at 105°C, 100kHz  
 ——— Case size  $\varnothing D \times L$  (mm)