

ALUMINUM ELECTROLYTIC CAPACITORS

BP Series

Features

- The BP Series is designed for horizontal deflection current in TV sets where high frequency.
- And high ripple current flows
- Low dissipation factor at high frequency.
- For detail specifications, please refer to Engineering Bulletin No.E111

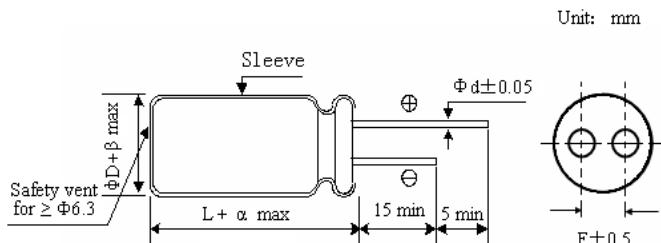
Specifications

| Item | Performance Characteristics | | | | | | | | | | | |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|----------------------|----|----|----|-----------------|---|---|---|
| Operating Temperature Range | -40~+105°C | | | | | | | | | | | |
| Rate Voltage Range | 25,50,63VDC | | | | | | | | | | | |
| Capacitance Range | 2.2~15μF | | | | | | | | | | | |
| Capacitance Tolerance | ±10% (120Hz, +20°C) | | | | | | | | | | | |
| Leakage current (+20°C,max.) | I=100 (μA) max. After 1 minutes with rated working voltage applied | | | | | | | | | | | |
| Dissipation factor (tgδ) | Less than 3%(+20°C,at 120HZ) | | | | | | | | | | | |
| Low Temperature Characteristics (120Hz) | Impedance ratio max. <table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>25</td> <td>50</td> <td>63</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table> | | | | Working Voltage(VDC) | 25 | 50 | 63 | Z-40°C / Z+20°C | 4 | 4 | 4 |
| Working Voltage(VDC) | 25 | 50 | 63 | | | | | | | | | |
| Z-40°C / Z+20°C | 4 | 4 | 4 | | | | | | | | | |
| Load Life | Test conditions Duration time :2000Hrs Ambient temperature : +105°C Applied voltage : Rated DC working voltage After test requirement at +20°C Capacitance change : ≤±15% of the initial measured value Dissipation factor : ≤150% of the initial specified value Leakage current : ≤The initial specified value | | | | | | | | | | | |
| Shelf Life | Test conditions Duration time : 1000Hrs Ambient temperature : +105°C Applied voltage : None After test requirement at +20°C : Same limits as Load life Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes | | | | | | | | | | | |

Multiplier for Ripple Current vs .Temperature

| | | | | | | |
|-----------------|------|------|------|------|------|------|
| Temperature(°C) | 45 | 60 | 70 | 85 | 95 | 105 |
| Multiplier | 2.10 | 1.90 | 1.65 | 1.40 | 1.25 | 1.00 |

Diagram of Dimensions



| | | | | | |
|----|-----|-----|-----|-----|-----|
| ΦD | 10 | 13 | 16 | 18 | 22 |
| F | 5.0 | 5.0 | 7.5 | 7.5 | 10 |
| Φd | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 |

BP series

Case Size

 $\Phi D \times L$

| Voltage | 25V | | | 50V | | | 63V | | |
|---------|-----------|---------------------------|------|-----------|---------------------------|------|-----------|---------------------------|------|
| Cap(μF) | Case Size | Ripple Current(Unit:AP-P) | | Case Size | Ripple Current(Unit:AP-P) | | Case Size | Ripple Current(Unit:AP-P) | |
| | | 85°C | 70°C | | 85°C | 70°C | | 85°C | 70°C |
| 2.2 | 13×25 | 5.8 | 7.5 | 13×25 | 5.8 | 7.5 | 13×25 | 5.8 | 7.5 |
| 3.3 | 16×25 | 7.0 | 9.1 | 16×25 | 7.0 | 9.1 | 16×25 | 7.0 | 9.1 |
| 4.7 | 16×31.5 | 7.8 | 10 | 16×31.5 | 7.8 | 10 | 16×31.5 | 7.8 | 10 |
| 6.8 | 16×35.5 | 8.0 | 10.4 | 16×35.5 | 8.0 | 10.4 | 16×35.5 | 8.0 | 10.4 |
| 10 | 18×35.5 | 8.6 | 11.1 | 18×35.5 | 8.6 | 11.1 | 18×35.5 | 8.6 | 11.1 |
| 12 | 18×41 | 8.8 | 11.5 | 18×41 | 8.8 | 11.5 | 18×41 | 8.8 | 11.5 |
| 15 | 18×41 | 9.5 | 12.2 | 18×41 | 9.5 | 12.2 | 18×41 | 9.5 | 12.2 |

Ripple Current (A,rms) at 15.75KHz, Case Size