

AXF SERIES
105°C Low profile, Snap-in Terminal Type
◆FEATURES

- Load Life : 105°C 3000 hours, with 20mm height.
- Smaller size with higher ripple current endurance than MXF series.
- RoHS compliance.


◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|-------------|--------------------|-----------------------------------|--------------------|--|------------------|------------------------------------|---------|---------|------------------|---------|---------|---------------|------|------|------|------|------|------|------|------|------|------|
| Category Temperature Range | -40~+105°C | -25~+105°C | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 10~100V.DC | 160~450V.DC | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | $I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I =Leakage Current(μA) V =Rated Voltage(V) C =Rated Capacitance(μF) | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tan δ) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>160~400</th> <th>420~450</th> </tr> </thead> <tbody> <tr> <td>(20°C, 120Hz)</td> <td>0.55</td> <td>0.50</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table> | | Rated Voltage (V) | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160~400 | 420~450 | (20°C, 120Hz) | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 | 0.15 | 0.20 |
| Rated Voltage (V) | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160~400 | 420~450 | | | | | | | | | | | | | | |
| (20°C, 120Hz) | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 | 0.15 | 0.20 | | | | | | | | | | | | | | |
| Impedance Ratio(MAX) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>10~100</th> <th>160~250</th> <th>315~450</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>8</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>—</td> <td>—</td> </tr> </tbody> </table> | | Rated Voltage (V) | 10~100 | 160~250 | 315~450 | Z(-25°C)/Z(20°C) | 3 | 3 | 8 | Z(-40°C)/Z(20°C) | 12 | — | — | | | | | | | | | | |
| Rated Voltage (V) | 10~100 | 160~250 | 315~450 | | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 3 | 3 | 8 | | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 12 | — | — | | | | | | | | | | | | | | | | | | | | | |
| Endurance | After applying rated voltage with rated ripple current for 3000hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table> | | Capacitance Change | Within ±20% of the initial value. | Dissipation Factor | Not more than 200% of the specified value. | Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | | |
| Capacitance Change | Within ±20% of the initial value. | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Not more than 200% of the specified value. | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | | | | | | | | | |

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Frequency (Hz) | 60(50) | 120 | 500 | 1k | 10k≤ |
|----------------|--------|------|------|------|------|
| 10~100WV | 0.90 | 1.00 | 1.05 | 1.10 | 1.15 |
| 160~250WV | 0.80 | 1.00 | 1.20 | 1.30 | 1.50 |
| 315~450WV | 0.80 | 1.00 | 1.20 | 1.25 | 1.40 |

◆PART NUMBER

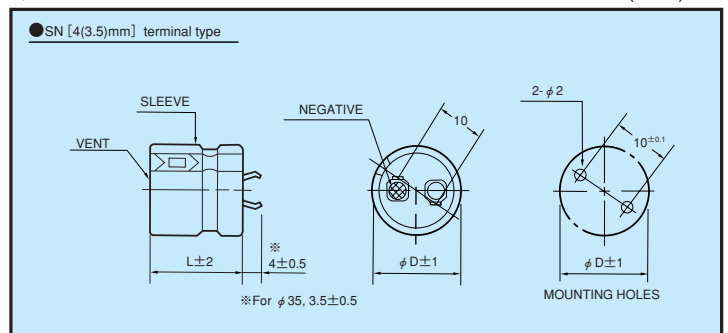
| | | | | | | |
|---------------|--------|-------------------|-----------------------|--------|---------------|-----------|
| □□□ | AXF | □□□□□ | □ | OOE | SN | D×L |
| Rated Voltage | Series | Rated Capacitance | Capacitance Tolerance | Option | Terminal Code | Case Size |

◆Option

| | Code |
|---------------|-------|
| without plate | OOE |
| with plate | Blank |

◆DIMENSIONS

(mm)



◆ STANDARD SIZE, RATED RIPPLE CURRENT

| WV Cap(μF) | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 |
|---------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 330 | | | | | | | | 20×20 0.60 |
| 390 | | | | | | | | 20×20 0.71 |
| 470 | | | | | | | 20×20 0.65 | 22×20 0.78 |
| 560 | | | | | | | 20×20 0.70 | 25×20 0.95 |
| 680 | | | | | | 20×20 0.83 | 22×20 0.84 | 25×20 1.09 |
| 820 | | | | | | 22×20 0.99 | 25×20 1.04 | 30×20 1.32 |
| 1000 | | | | | 20×20 0.87 | 22×20 1.10 | 25×20 1.19 | |
| 1200 | | | | | 22×20 1.02 | 25×20 1.20 | 30×20 1.44 | |
| 1500 | | | | 20×20 0.80 | 25×20 1.15 | 30×20 1.47 | | |
| 1800 | | | | 22×20 0.94 | 25×20 1.34 | 30×20 1.52 | | |
| 2200 | | | 20×20 0.98 | 22×20 1.04 | 30×20 1.60 | | | |
| 2700 | | | 22×20 1.08 | 25×20 1.29 | | | | |
| 3300 | | 20×20 1.06 | 22×20 1.29 | 30×20 1.45 | | | | |
| 3900 | | 20×20 1.25 | 25×20 1.58 | | | | | |
| 4700 | 20×20 0.98 | 22×20 1.38 | 25×20 1.61 | | | | | |
| 5600 | 20×20 1.16 | 25×20 1.68 | | | | | | |
| 6800 | 22×20 1.31 | 25×20 1.80 | | | | | | |
| 8200 | 25×20 1.59 | | | | | | | |
| 10000 | 25×20 1.77 | | | | | | | |

| WV Cap(μF) | 160 | 180 | 200 | 220 | 250 | 315 | 350 | 385 |
|---------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 39 | | | | | | | | 20×20 0.35 |
| 47 | | | | | | | 20×20 0.38 | 20×20 0.38 |
| 56 | | | | | | 20×20 0.41 | 20×20 0.40 | 22×20 0.42 |
| 68 | | | | | | 22×20 0.48 | 22×20 0.45 | 25×20 0.50 |
| 82 | | | | | | 22×20 0.51 | 25×20 0.54 | 25×20 0.52 |
| 100 | | | | | 20×20 0.59 | 25×20 0.57 | 25×20 0.57 | 30×20 0.61 |
| 120 | | | 20×20 0.63 | 20×20 0.60 | 22×20 0.65 | 30×20 0.65 | 30×20 0.65 | 30×20 0.64 |
| 150 | | 20×20 0.66 | 20×20 0.66 | 22×20 0.70 | 25×20 0.74 | 30×20 0.70 | 35×20 0.78 | 35×20 0.80 |
| 180 | 20×20 0.69 | 22×20 0.80 | 22×20 0.80 | 25×20 0.80 | 25×20 0.77 | 35×20 0.85 | 35×20 0.85 | |
| 220 | 22×20 0.81 | 25×20 0.90 | 25×20 0.87 | 25×20 0.85 | 30×20 0.95 | 35×20 0.90 | | |
| 270 | 25×20 0.98 | 25×20 0.95 | 25×20 0.95 | 30×20 1.02 | 30×20 1.00 | | | |
| 330 | 25×20 1.02 | 30×20 1.15 | 30×20 1.15 | 30×20 1.12 | 35×20 1.16 | | | |
| 390 | 30×20 1.25 | 30×20 1.20 | 30×20 1.20 | 35×20 1.25 | | | | |
| 470 | 30×20 1.30 | 35×20 1.36 | 35×20 1.41 | | | | | |
| 560 | 35×20 1.46 | 35×20 1.43 | | | | | | |
| 680 | 35×20 1.51 | | | | | | | |

| WV Cap(μF) | 400 | 420 | 450 |
|---------------|------------|------------|------------|
| 27 | | | 20×20 0.26 |
| 33 | | 20×20 0.30 | 20×20 0.30 |
| 39 | 20×20 0.34 | 20×20 0.34 | 22×20 0.36 |
| 47 | 22×20 0.39 | 22×20 0.38 | 25×20 0.41 |
| 56 | 22×20 0.40 | 25×20 0.45 | 25×20 0.43 |
| 68 | 25×20 0.49 | 25×20 0.48 | 30×20 0.50 |
| 82 | 30×20 0.55 | 30×20 0.53 | 30×20 0.53 |
| 100 | 30×20 0.60 | 30×20 0.58 | 35×20 0.61 |
| 120 | 35×20 0.75 | 35×20 0.70 | |
| 150 | 35×20 0.80 | | |

↑ Ripple Current (A r.m.s./120Hz, 105°C)
 ↑ Case Size φ D×L(mm)