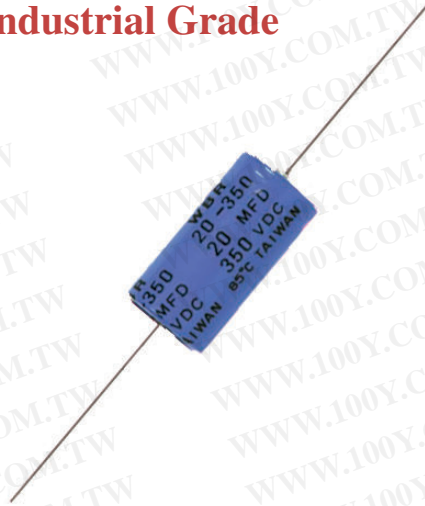


Type WBR 85 °C, Industrial Grade, Axial Leaded, Aluminum

85 °C, Industrial Grade



Type WBR capacitors are the preferred choice for many varied industrial applications because they have high capacitance and extended life characteristics. The rugged construction delivers the high vibration resistance required in industrial applications

Highlights

- High capacitance
- Extended life
- Rugged construction
- High vibration resistance

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Specifications

| | |
|-------------------------------------|---|
| Capacitance Range: | 1.0 to 5,000 μ F |
| Voltage Range: | 16 to 450 Vdc |
| Capacitance Tolerance: | 16 to 50 Vdc -10 + 150%, 75 to 350 Vdc -10 + 100%, 450 Vdc -10 + 50% |
| Operating Temperature Range: | -40 °C +85°C |
| Leakage Current: | 16-75 Vdc 0.01CV + 10 μ A 150-450 Vdc 0.03CV + 20 μ A |
| Ripple Current Multipliers: | Ambient Temperature |

| 45 °C | 55 °C | 65 °C | 75 °C | 85 °C | 95 °C | 105 °C |
|-------|-------|-------|-------|-------|-------|--------|
| 1.50 | 1.46 | 1.32 | 1.17 | 1.00 | 0.79 | 0.50 |

| Frequency | 60 Hz | 120 Hz | 400 Hz | 1000 Hz | 10 kHz | 50 kHz | 100 kHz |
|-------------|-------|--------|--------|---------|--------|--------|---------|
| 0-60 Vdc | 0.85 | 1.00 | 1.10 | 1.15 | 1.15 | 1.15 | 1.15 |
| 61-200 Vdc | 0.83 | 1.00 | 1.15 | 1.20 | 1.20 | 1.20 | 1.20 |
| 201-450 Vdc | 0.80 | 1.00 | 1.15 | 1.30 | 1.30 | 1.30 | 1.30 |



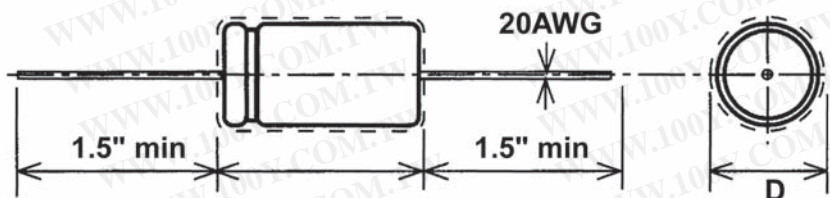
Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

Load Life: 2,000 h @ +85 °C
Capacitance \pm 20%
ESR 150% of limit
DCL 100% of limit

Shelf Life: 500 h @ 85 °C
Capacitance \pm 20%
ESR 150% of limit
DCL 100% of limit

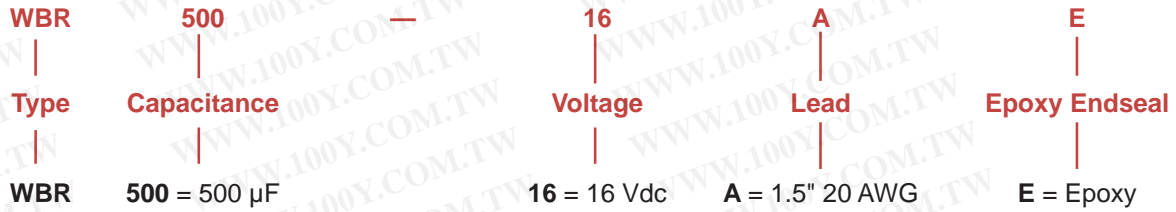
Vibration: 10 to 55 Hz; 0.06" and 10 g max, 2 h in each plane

Outline Drawing



Type WBR 85 °C, Industrial Grade, Axial Leaded, Aluminum

Part Numbering System



Blank = No epoxy

Ratings

| Cap (µF) | Catalog Part Number | Max ESR 120 Hz (Ω) | Ripple @ 85 °C 120 Hz (A) | Max Case Size D x L (Inches) | |
|------------------------------|---------------------|--------------------|---------------------------|------------------------------|------|
| 16 Vdc (20 Vdc Surge) | | | | | |
| 100 | WBR100-16A | 5.30 | 0.057 | 0.34 | 0.76 |
| 250 | WBR250-16A | 2.10 | 0.118 | 0.34 | 0.88 |
| 500 | WBR500-16A | 1.10 | 0.270 | 0.40 | 1.00 |
| 1000 | WBR1000-16A | 0.53 | 0.420 | 0.40 | 1.32 |
| 2000 | WBR2000-16A | 0.27 | 0.660 | 0.47 | 1.57 |
| 3000 | WBR3000-16A | 0.18 | 0.820 | 0.52 | 1.83 |
| 4000 | WBR4000-16A | 0.13 | 1.000 | 0.65 | 1.83 |
| 5000 | WBR5000-16A | 0.11 | 1.200 | 0.65 | 1.83 |
| 25 Vdc (30 Vdc Surge) | | | | | |
| 10 | WBR10-25A | 48.00 | 0.018 | 0.28 | 0.57 |
| 25 | WBR25-25A | 19.00 | 0.031 | 0.28 | 0.57 |
| 50 | WBR50-25A | 9.50 | 0.044 | 0.34 | 0.76 |
| 100 | WBR100-25A | 4.80 | 0.074 | 0.34 | 0.76 |
| 250 | WBR250-25A | 1.80 | 0.155 | 0.40 | 1.00 |
| 500 | WBR500-25A | 0.95 | 0.280 | 0.40 | 1.32 |
| 1000 | WBR1000-25A | 0.48 | 0.450 | 0.47 | 1.57 |
| 2000 | WBR2000-25A | 0.23 | 0.720 | 0.65 | 1.83 |
| 35 Vdc (40 Vdc Surge) | | | | | |
| 100 | WBR100-35A | 4.40 | 0.086 | 0.40 | 0.88 |
| 150 | WBR150-35A | 2.95 | 0.114 | 0.40 | 1.00 |
| 300 | WBR300-35A | 1.45 | 0.195 | 0.47 | 1.32 |
| 500 | WBR500-35A | 0.87 | 0.285 | 0.52 | 1.67 |
| 1000 | WBR1000-35A | 0.44 | 0.450 | 0.54 | 1.67 |
| 2000 | WBR2000-35A | 0.22 | 0.910 | 0.65 | 1.83 |
| 3000 | WBR3000-35A | 0.15 | 1.150 | 0.74 | 1.69 |
| 50 Vdc (65 Vdc Surge) | | | | | |
| 1 | WBR1-50A | 390.00 | 0.010 | 0.28 | 0.57 |
| 2 | WBR2-50A | 195.00 | 0.012 | 0.28 | 0.57 |
| 5 | WBR5-50A | 77.00 | 0.014 | 0.28 | 0.57 |
| 10 | WBR10-50A | 39.00 | 0.020 | 0.28 | 0.57 |
| 25 | WBR25-50A | 15.50 | 0.035 | 0.34 | 0.76 |
| 50 | WBR50-50A | 7.70 | 0.060 | 0.40 | 1.88 |
| 100 | WBR100-50A | 3.90 | 0.140 | 0.40 | 1.00 |
| 150 | WBR150-50A | 2.50 | 0.160 | 0.40 | 1.00 |
| 250 | WBR250-50A | 1.50 | 0.220 | 0.40 | 1.32 |
| 500 | WBR500-50A | 0.77 | 0.340 | 0.52 | 1.57 |
| 1000 | WBR1000-50A | 0.39 | 0.530 | 0.65 | 1.83 |
| 1500 | WBR1500-50A | 0.25 | 0.740 | 0.65 | 1.83 |
| 75 Vdc (95 Vdc Surge) | | | | | |
| 150 | WBR150-75A | 2.50 | 0.180 | 0.47 | 1.32 |
| 275 | WBR275-75A | 1.30 | 0.280 | 0.52 | 1.57 |
| 500 | WBR500-75A | 0.72 | 0.400 | 0.65 | 1.83 |

| Cap (µF) | Catalog Part Number | Max ESR 120 Hz (Ω) | Ripple @ 85 °C 120 Hz (A) | Max Case Size D x L (Inches) | |
|--------------------------------|---------------------|--------------------|---------------------------|------------------------------|------|
| 150 Vdc (175 Vdc Surge) | | | | | |
| 4 | WBR4-150A | 78.00 | 0.018 | 0.34 | 0.88 |
| 5 | WBR5-150A | 62.00 | 0.020 | 0.34 | 0.88 |
| 8 | WBR8-150A | 39.00 | 0.030 | 0.40 | 0.88 |
| 10 | WBR10-150A | 31.00 | 0.034 | 0.40 | 0.88 |
| 16 | WBR16-150A | 19.50 | 0.045 | 0.40 | 1.00 |
| 20 | WBR20-150A | 15.50 | 0.050 | 0.40 | 1.32 |
| 30 | WBR30-150A | 10.50 | 0.085 | 0.40 | 1.57 |
| 40 | WBR40-150A | 7.80 | 0.096 | 0.47 | 1.32 |
| 50 | WBR50-150A | 6.20 | 0.105 | 0.47 | 1.57 |
| 60 | WBR60-150A | 5.20 | 0.130 | 0.65 | 1.57 |
| 80 | WBR80-150A | 3.90 | 0.155 | 0.65 | 1.83 |
| 100 | WBR100-150A | 3.10 | 0.190 | 0.65 | 1.83 |
| 150 | WBR150-150A | 2.05 | 0.230 | 0.74 | 1.69 |
| 180 Vdc (250 Vdc Surge) | | | | | |
| 125 | WBR125-180A | 2.30 | 0.300 | 0.74 | 1.69 |
| 250 Vdc (300 Vdc Surge) | | | | | |
| 4 | WBR4-250A | 64.00 | 0.035 | 0.40 | 1.00 |
| 8 | WBR8-250A | 32.00 | 0.056 | 0.40 | 1.32 |
| 12 | WBR12-250A | 21.50 | 0.062 | 0.40 | 1.32 |
| 16 | WBR16-250A | 16.00 | 0.065 | 0.47 | 1.57 |
| 20 | WBR20-250A | 12.50 | 0.075 | 0.47 | 1.57 |
| 30 | WBR30-250A | 8.40 | 0.105 | 0.52 | 1.57 |
| 40 | WBR40-250A | 6.30 | 0.125 | 0.52 | 1.83 |
| 50 | WBR50-250A | 5.00 | 0.140 | 0.65 | 1.83 |
| 60 | WBR60-250A | 4.20 | 0.180 | 0.65 | 1.83 |
| 80 | WBR80-250A | 3.10 | 0.200 | 0.74 | 1.69 |
| 350 Vdc (400 Vdc Surge) | | | | | |
| 4 | WBR4-350A | 51.00 | 0.036 | 0.40 | 1.00 |
| 8 | WBR8-350A | 26.00 | 0.050 | 0.47 | 1.32 |
| 20 | WBR20-350A | 10.00 | 0.090 | 0.52 | 1.57 |
| 40 | WBR40-350A | 5.10 | 0.135 | 0.65 | 1.83 |
| 450 Vdc (525 Vdc Surge) | | | | | |
| 1 | WBR1-450A | 205.00 | 0.023 | 0.40 | 1.00 |
| 2 | WBR2-450A | 102.00 | 0.030 | 0.40 | 1.00 |
| 4 | WBR4-450A | 51.00 | 0.038 | 0.47 | 1.57 |
| 5 | WBR5-450A | 40.00 | 0.042 | 0.47 | 1.57 |
| 8 | WBR8-450A | 26.00 | 0.053 | 0.47 | 1.57 |
| 10 | WBR10-450A | 20.00 | 0.058 | 0.52 | 1.57 |
| 12 | WBR12-450A | 17.00 | 0.062 | 0.65 | 1.83 |
| 16 | WBR16-450A | 12.50 | 0.084 | 0.65 | 1.83 |
| 20 | WBR20-450A | 10.00 | 0.105 | 0.65 | 1.83 |
| 30 | WBR30-450A | 6.70 | 0.130 | 0.74 | 1.69 |