

BWB Series



- Constant Current up to 100 amps (0.5mΩ)
- Four Terminal Configuration
- Excellent Long Term Stability
- Max. Solder Temperature up to 350°C / 30sec
- RoHS and REACH Certified
- AEC-Q200 Qualified
- Applications : Current Sensing / Feedback, Automotive Applications
 Power Modules, Frequency Converters

GENERAL SPECIFICATION

| Model | Rated Power [W] | | Resistance [mΩ] | t±0.1 | Material | T.C.R [ppm/°C] | Resistance Tolerance |
|-------|-----------------|--------|-----------------|-------|-----------------------------|----------------|-------------------------------------|
| | *70°C | *100°C | | | | | |
| BWB05 | 12 | 5 | 0.2 | 1.40 | Copper Manganese Alloy | Max. ±50 | F [±1.0%] G [±2.0%] J [±5.0%] |
| | 10 | 5 | 0.3 | 0.99 | | | |
| | 9 | 5 | 0.5 | 0.65 | | | |
| | 8 | 5 | 0.7 | 0.47 | | | |
| | 7 | 5 | 1.0 | 0.35 | Aluchrom Alloy / NiCr Alloy | | |
| | 7 | 4 | 2.0 | 0.50 | | | |
| | 5 | 3 | 3.0 | 0.34 | | | |
| | 4 | 2 | 4.0 | 0.34 | | | |
| 3 | 2 | 5.0 | 0.34 | | | | |

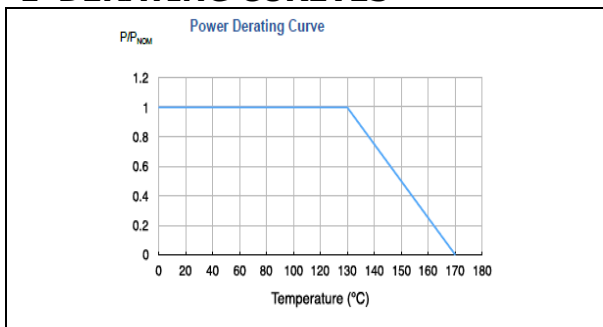
*:Terminal temperature

CHARACTERISTICS

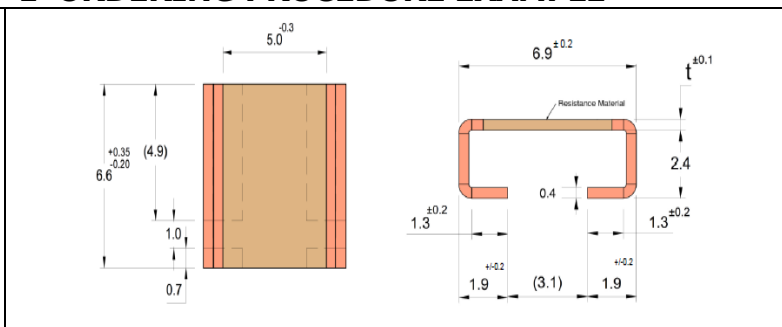
Values in [] mean Change in Ω After Test

| | | |
|------------------------------|---------|--|
| Applicable Temperature range | | -55°C ~ +170°C |
| High Temperature Exposure | ±[1.0%] | 1000 hrs. @ T=170°C. Unpowered |
| Temperature Cycling | ±[0.5%] | -55°C to 150°C, 1000 Cycles, 30minutes at each extreme |
| Biased Humidity | ±[0.5%] | 85°C & 85%RH with 10% Operating power, 1000 hrs |
| Operational Life | ±[1.0%] | 125°C at rated power, 1000 hrs |
| Mechanical Shock | ±[0.2%] | 100g For 6ms, Half sine |
| Vibration | ±[0.2%] | 5g for 20 minutes, 12 cycles each of 3 orientations. 10-2000Hz |
| Resistance to Soldering Heat | ±[0.5%] | Solder Temp. 260°C, Time 10 seconds |
| Short Time Over Load | ±[1.0%] | 5 x Rated Power for 5 Seconds |
| Low Temperature Storage | ±[0.2%] | -65°C for 24 hrs |

DERATING CURVES



ORDERING PROCEDURE EXAMPLE



ORDERING PROCEDURE EXAMPLE & REEL INFORMATION

| BWB05 ↓ Model # | 1mΩ ↓ Resistance value | F ↓ Resistance tolerance | J[±5%] G[±2%] F[±1%] | | | | | | | | |
|--|------------------------------|--------------------------------|----------------------------|------------------|--|--------------------|----------------|---------------|-------|--------------------------|----------|
| <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Reel Information</th> </tr> </thead> <tbody> <tr> <td>Reference Standard</td> <td>DIN EN 60286-3</td> </tr> <tr> <td>Width of Reel</td> <td>16 mm</td> </tr> <tr> <td>Number of parts per Reel</td> <td>1400 pcs</td> </tr> </tbody> </table> | | | | Reel Information | | Reference Standard | DIN EN 60286-3 | Width of Reel | 16 mm | Number of parts per Reel | 1400 pcs |
| Reel Information | | | | | | | | | | | |
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