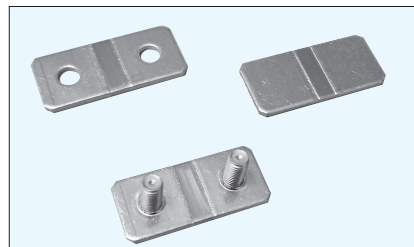


**ISA-WELD SHUNT RESISTORS** **BVM-F**

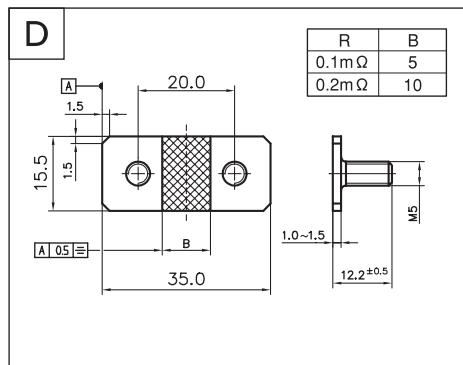
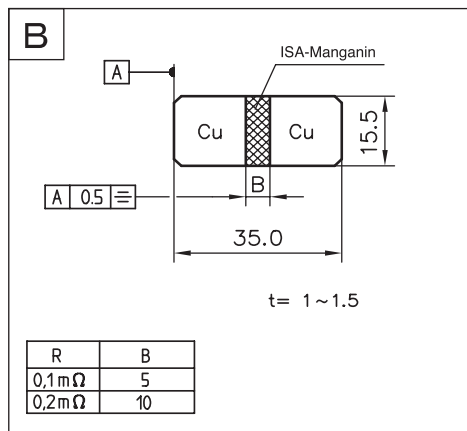
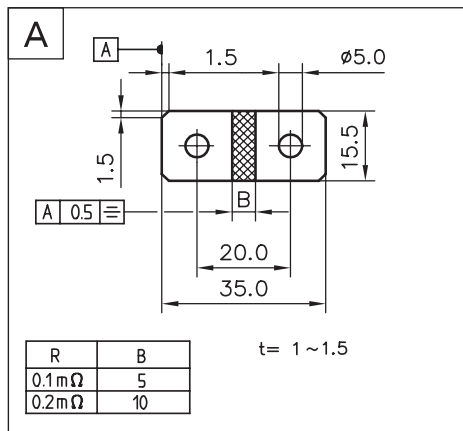
Max. Current (Permanent) 200A / 0.1mΩ



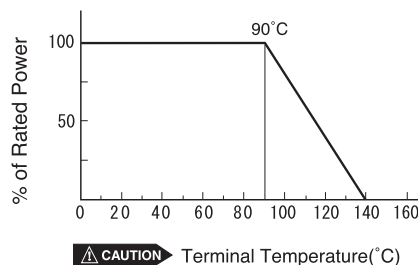
| Type  | Load Capacity (W)* | Resistance Range (Ω)     | Tolerance (%) | Temp. Coefficient (20°C~60°C) | Operating Temp. | Internal Heat Resistance (°C/W) | Weight(g) |
|-------|--------------------|--------------------------|---------------|-------------------------------|-----------------|---------------------------------|-----------|
| BVM-F | 5                  | 0.1m, 0.2m<br>0.3m, 0.5m | ±5            | ±50ppm/°C                     | -55°C~+140°C    | 10°C/W                          | 9.5       |

\*Referring to power derating curve. Proper measures for heat radiation should be taken. **CAUTION**

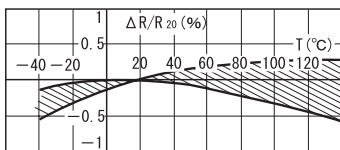
**Shape & Dimensions**



**Power Derating Curve**



**Resistance Change Versus Temp. (ISA Manganin)**



**How to order**

**BVM-F** **D** **0.1mΩ** **±5%**  
 Type Shape Resistance Tolerance

- Standard Resistance (Stock)
- BVM-F-A 0.1mΩ (±5%)
- BVM-F-B 0.1mΩ (±5%)
- BVM-F-D 0.1mΩ (±5%)
- BVM-F-A 0.2mΩ (±5%)
- BVM-F-B 0.2mΩ (±5%)
- BVM-F-D 0.2mΩ (±5%)

**Performance**

| Parameters                   | Test Conditions                                    | Specification |
|------------------------------|--|---------------|
| Thermal Shock                | -65°C, 25°C, 125°C, 25°C 25cycles                  | ±0.1%         |
| Over load                    | 5×Wattage Rating 5sec                              | ±0.2%         |
| Resistance to Solvents       | IPA 3min   | No damage     |
| Resistance to Soldering Heat | 260°C 10sec  | ±0.2%         |
| Moisture Resistance          | Near 100%RH, +25°C, +65°C, -10°C 10cycles (10days) | ±0.2%         |
| Shock                        | 50g's, 11ms  | ±0.2%         |
| Vibration, High Frequency    | MIL-STD-202 Method 204D-B                          | ±0.2%         |
| Load Life (stability)        | 1.5HrON, 0.5HrOFF 2000Hr                           | ±0.5%         |
| High Temperature Exposure    | 140°C, 2000Hr                                      | ±0.3%         |
| Current Noise                | MIL-STD-202 method 308                             | ±0.01%        |
| Thermal EMF (μV/°C)          | 0~100°C  | 2μV/°C max    |
| Frequency Characteristic     | Inductance   | <3nH          |