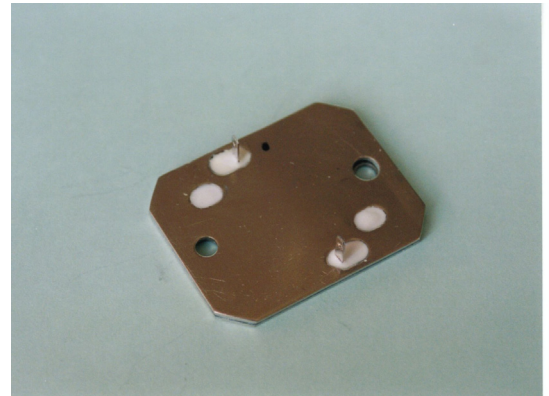


4端子高周波電流検出抵抗器
RF CURRENT DETECT RESISTORS

RAF-30



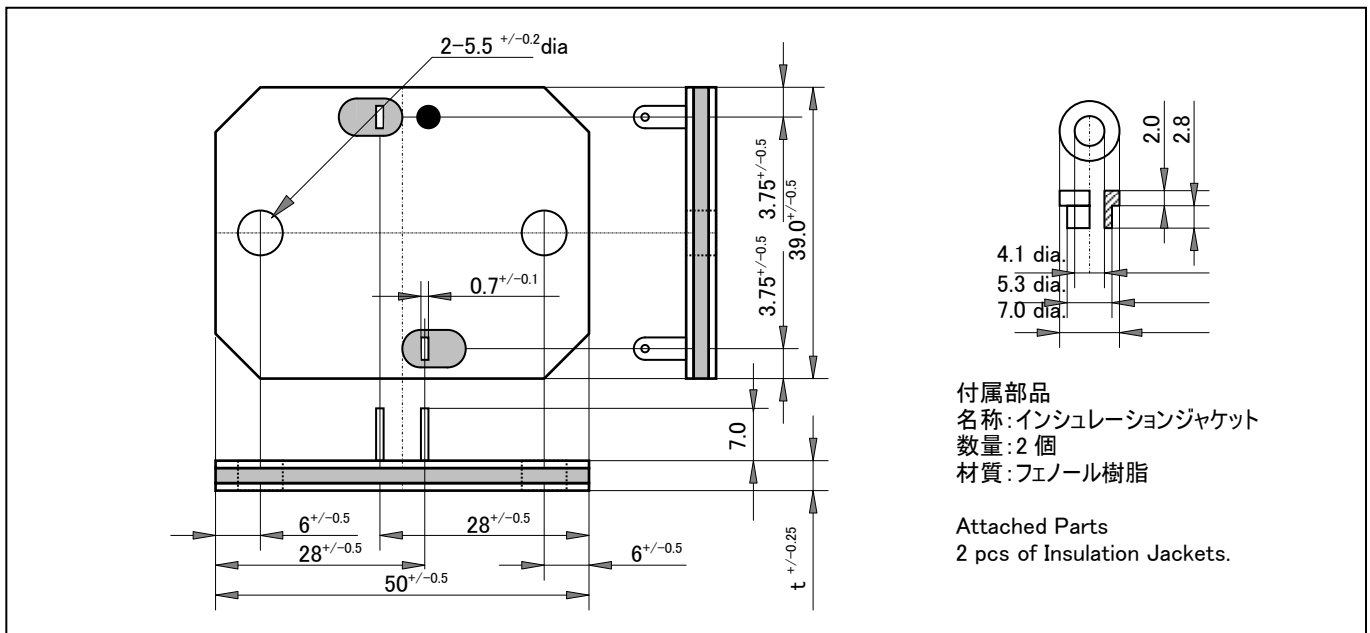
特長用途

1milliohm から10milliohm 定格電力 30W、ケルビン4端子、ブ
ス
バー取付型精密電流検出器。
電流端子間距離を極めて小さくする構造、200A クラスの大電流
(1milliohm)を、インダクタンスの影響を減少させ、電圧に変換。
工業計測、計測器、精密電源装置、精密装置電源、定電流
電源、半導体試験装置、AC モータ制御、アクチュエータ制御、
インバータ、IPM、2次電池充電回路など。

Features and Applications

1milliohm to 10milliohm, 30W rating power, Kelvin 4
terminal, bus-bar attachment type, precision current
detector.
Inductance influence has been decreased through the
small distance between current terminals.
Applications include industrial measurement,
measuring instruments, precision power supply,
precision equipment power supply, constant current
power supply, IC test equipment, ac motor control,
actuator control, inverters, IPM, rechargeable battery
charge circuits, etc.

寸法 Dimensions (mm)



形名呼称 Ordering Information

| Type | TCR | Resistance | Tolerance | Code | Note |
|--------|----------------------------|---|------------------------|------|----------|
| RAF-30 | C | 0R001 | F (1%) | 000 | |
| RAF-30 | C (50ppm/C) E (25ppm/C) | 0R001 0R002 0R003 0R004 0R005 0R008 0R010 | F (1.0 %) D (0.5 %) | 000 | Not RoHS |

4端子高周波電流検出抵抗器 RF CURRENT DETECT RESISTORS

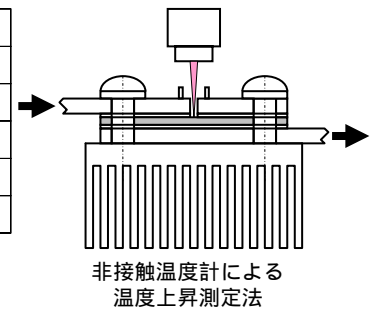
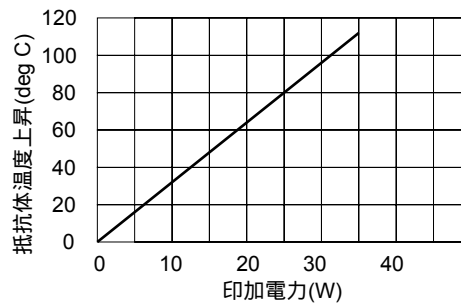
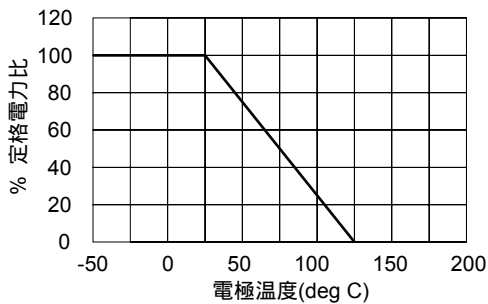
RAF-30

電氣的仕様 Specifications

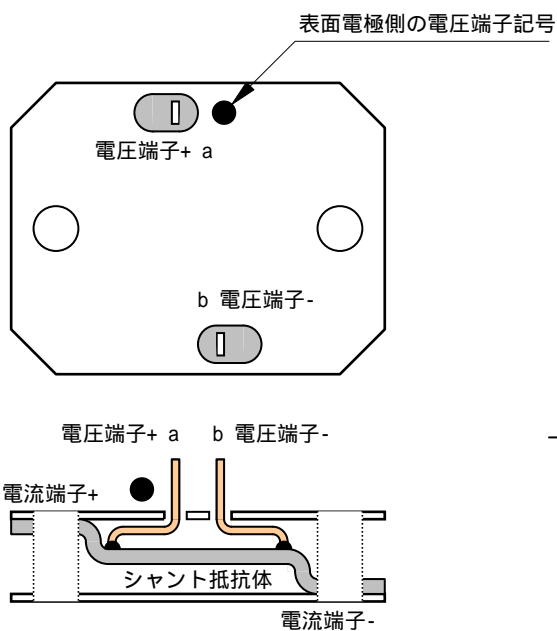
| | | Specifications | Conditions |
|--------|-----------------------|--|------------|
| 定格電力 | Power Rating | 30W with heat sink (Bus Bar) | |
| 定格使用温度 | Rating Temperature | -55 to +125 degree C | |
| 公称抵抗値 | Resistance | 1milliohm to 5milliohms | |
| 抵抗値許容差 | Tolerance | +/-0.5%(D), +/-1.0%(F), | |
| 抵抗温度係数 | TCR | +/-50ppm/K (C), +/-25ppm/K (E) | |
| 熱起電力 | Thermal EMF | Less than 1micro Volts in 0 to 100 degree C. | |
| 使用温度範囲 | Operating Temperature | -55 to +125 degree C | |
| 重量 | Weight | 38 grams | |

Notes: Thickness, t=2.7mm (1m ohm), t=2.4mm (2m ohm), t=2.3mm(> 4 mohm)

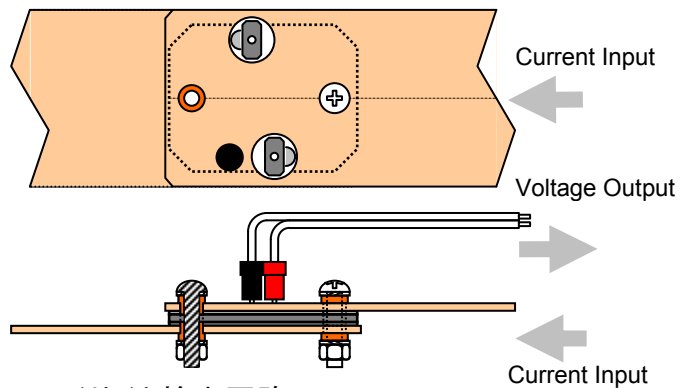
負荷軽減と抵抗体温度上昇



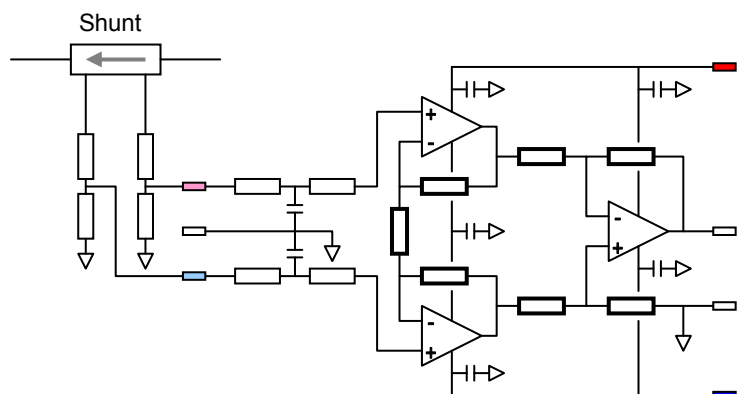
検出電圧の極性(内部構造)説明



代表的なブスバーへの実装方法



ハイサイド検出回路



20121201