

PRECISION POWER SHUNT RESISTORS

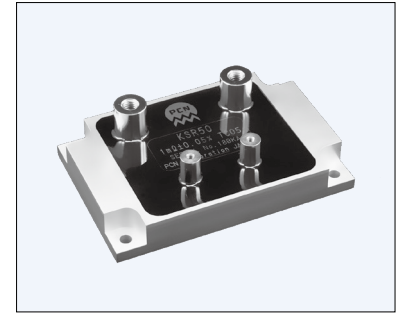
KSR50

Features

- Precision power shunt resistor for current detection
- Zeranin used for precision resistance rod
- Realizing high heat dissipation and low TCR($\pm 5\text{ppm}/^\circ\text{C}$)

Type	Wattage Rating		Standard Resistance (Ω)	Tolerance (%)	Temp.Coefficient (ppm/°C)	Thermal EMF (0~100°C)	Weight (g)
	Chassis Mounted*	Free Air					
KSR50	50	20	1m, 2m, 5m 10m, 20m, 50m, 100m	± 0.05 (A) ± 0.1 (B)	$\pm 5, \pm 10$	$2\mu\text{V}/^\circ\text{C}$ MAX	300

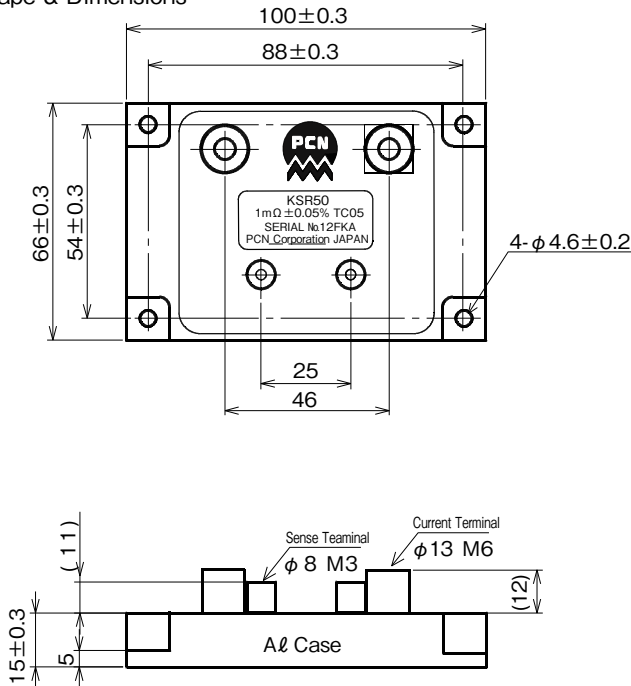
Operating Temp. : $-55^\circ\text{C}\sim+125^\circ\text{C}$



· Max. Current : 220A (1m Ω)

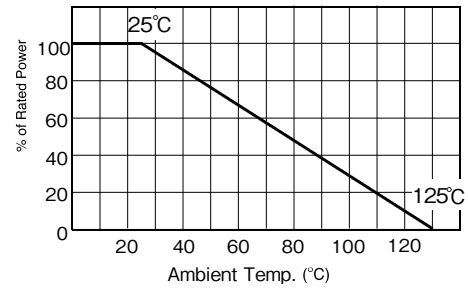
* Test Chassis Dimensions(mm) : 305 x 305 x 3t A ℓ
 (Thermal Resistance : About $1^\circ\text{C}/\text{W}$)

Shape & Dimensions

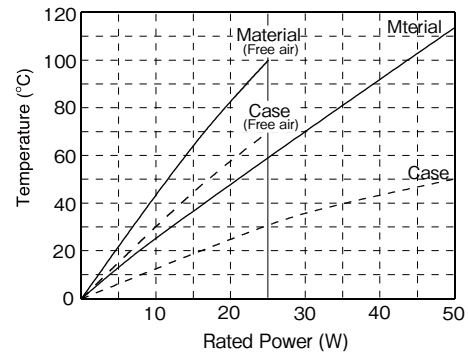


Terminal : Copper nickel-plated
 Sealant : Epoxy resin (Black)

Ambient Temp. Derating Curve



**Surface Temp. Versus Power load.
KSR50 1m Ω**



Connection cable
 AWG4 2pcs x 2(Connecting chassis)
 AWG4 1pc x 2(Free air)

Precautions

The KSR50 series is designed for mounting on chassis and note the followings.
 (1) Select a chassis of which resistor mounting area is free from asperity and good for surface adhesion. Also, apply grease with good thermal conductivity between the chassis and the resistor.
 (2) When using in a vibrating environment, the vibration will be transmitted through the connection cable and can cause damage to the terminals. Install relay terminals so that vibrations are not transmitted to the terminals of the resistor directly.

How to order

KSR50 1m Ω A TC05
 Type Resistance Tolerance Temp. Coefficient

TC05 : $\pm 5\text{ppm}/^\circ\text{C}$
 TC10 : $\pm 10\text{ppm}/^\circ\text{C}$

● Order for a single piece accepted

特性

Parameters	Test Condition	Specification
Short Time Over Load	2 x Wattage Rating 5sec	$\pm 0.05\%$
High Temperature Exposure	Temp. $+85^\circ\text{C}$ 1000Hr (Moisture 85%)	$\pm 0.05\%$
Dielectric Strength	AC1000V 1min.	$\pm 0.02\%$
Insulation Resistance	DC500V	1G Ω
Load Life	Load Rating 1.5Hr ON 0.5Hr OFF Repeat 2000Hr	$\pm 0.2\%$
Temp. Coefficient	Standard Temp. $+25^\circ\text{C}$, Test Temp. $+100^\circ\text{C}$	Fig.1

