

## BARE METAL ELEMENT RESISTORS

**MSR** SERIES

### FEATURES

- Designed for current sensing or Shunt Applications
- Economical Bare Metal Resistance Element
- Welded, Flameproof Construction
- Values from 0.005 Ohms
- Tolerance of  $\pm 1\%$  and  $\pm 5\%$
- Low Inductance
- Resistance Element TCR 20ppm/ $^{\circ}\text{C}$

Bare Element Resistors were developed for current sensing and shunt applications. The resistance element is a special ribbon alloy, with the tinned copper or copper-clad steel leads welded to the element. This rugged construction offers a low cost and reliable alternative to encapsulated designs and the built in stand-offs with standard lead spacings allow for easy mountings.

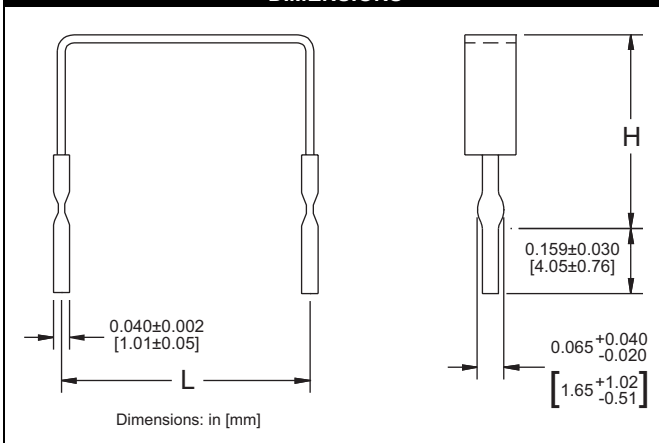
Ordering Part Number – Resistance – Tolerance  
 Example: **MSR-3 R05 F**



### SPECIFICATIONS

Type	Power Rating (W@85°C)	Resistance Range	Tolerances	Inductance	L		H	
MSR-1	1	0.005 to 0.1	$\pm 1\%$ , $\pm 5\%$	< 10nH	0.45	+0.04 -0.02	0.2 $\pm$ 0.1	In
					11.43	+1.02 -0.51	5.08 $\pm$ 2.54	mm
MSR-3	3	0.005 to 0.1	$\pm 1\%$ , $\pm 5\%$	< 10nH	0.6	+0.04 -0.02	1.0 Max	In
					15.24	+1.02 -0.51	25.4 Max	mm
MSR-5	5	0.005 to 0.05	$\pm 1\%$ , $\pm 5\%$	< 10nH	0.8	+0.04 -0.02	1.0 Max	In
					20.32	+1.02 -0.51	25.4 Max	mm

### DIMENSIONS



### DERATING CURVE

