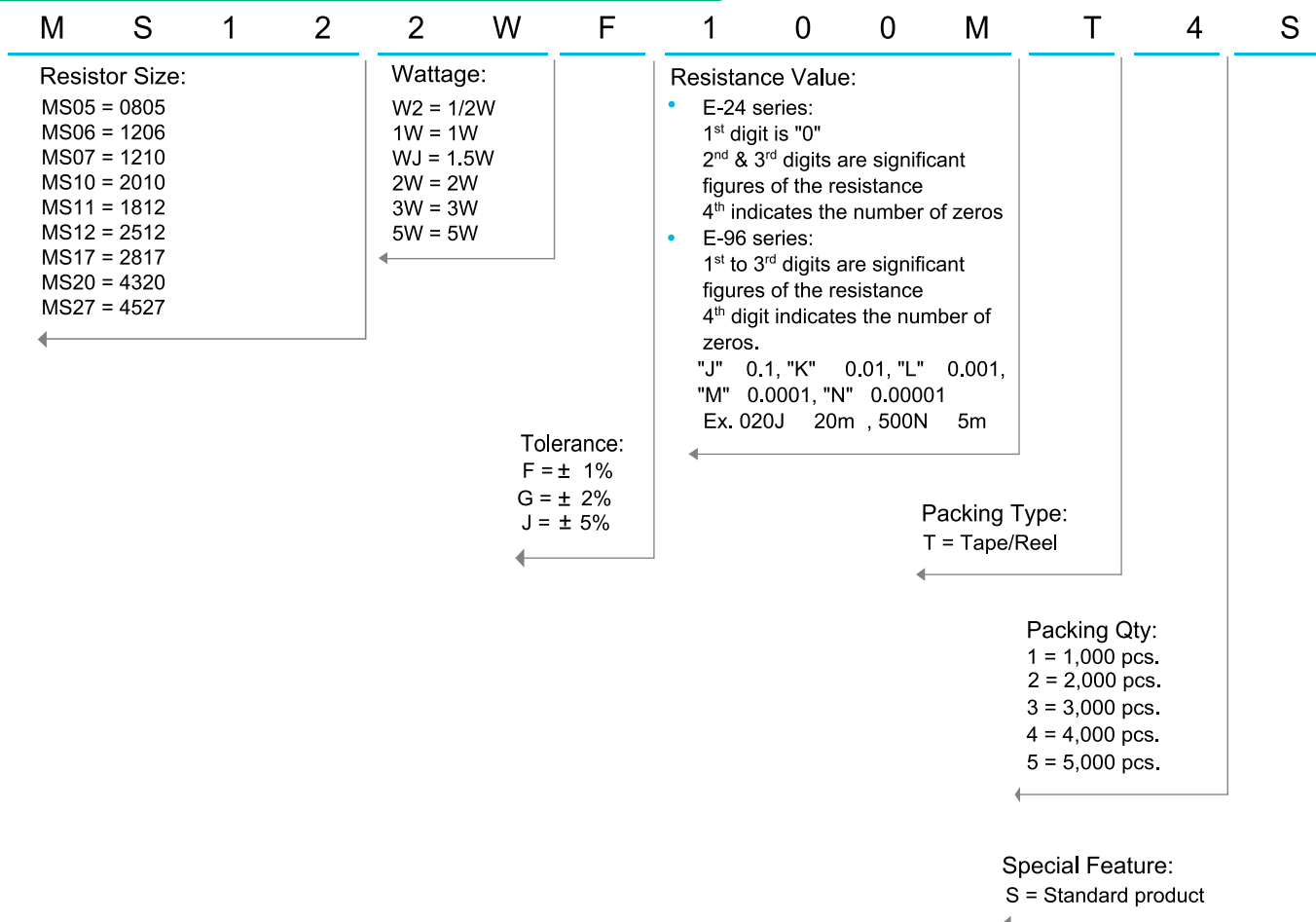


# Metal Strip Current Sensing Chip Resistors (MS)

## Performance Specification

Short Time Overload	$\pm 5\%: \pm(2.0\% + 0.001\Omega)\text{Max}$
	$\pm 1\% \& \pm 2\%: \pm(1.0\% + 0.001\Omega)\text{Max}$
Soldering Heat	$\pm(0.5\% + 0.005\Omega)\text{Max}$
Solderability	Min. 95% coverage.
Load Life in Humidity	$\pm 5\%: \pm(3.0\% + 0.001\Omega)\text{Max}$
	$\pm 1\% \& \pm 2\%: \pm(1.0\% + 0.001\Omega)\text{Max}$
Load Life	$\pm 5\%: \pm(3.0\% + 0.001\Omega)\text{Max}$
	$\pm 1\% \& \pm 2\%: \pm(1.0\% + 0.001\Omega)\text{Max}$
Temperature Cycling	$\pm(0.5\% + 0.005\Omega)\text{Max}$
Low Temperature Storage	$\pm(1\% + 0.001\Omega)\text{Max}$
High Temperature Exposure	$\pm(1\% + 0.001\Omega)\text{Max}$

Ordering Procedure: Ex.: MS12, 2W, +/-1%, 10 mΩ T/R-4000



# Metal Strip Current Sensing Chip Resistors (MS)

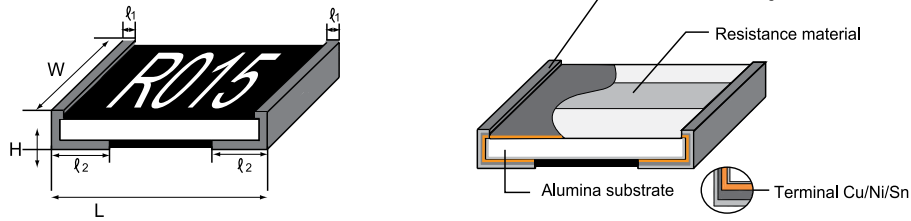
## Features

- Able to withstand high power
- Ultra Low sensing resistance
- Excellent frequency response
- Excellent frequency coefficient characteristics
- Lead free, RoHS compliant for globe applications and halogen free

## Application

- Mobile electronic equipment - Cellular phone, NB Tablet PC, GPS, DSC, HDD
- DC-DC converter, Adapter, Battery pack and charger
- Switching power supply
- Voltage Regulation module
- Power management applications

## Dimension



Type	Power Rating at 70°C	Tolerance % Resistance Value (mΩ)		T.C.R. (PPM/°C)	Dimension (mm)				
		1%	5%		L	W	H	l <sub>1</sub>	l <sub>2</sub>
MS05 (0805)	1/2W	5,9,10,20	5,9,10,20	±100	2.00±0.30	1.20±0.30	0.60±0.20	≤1.00	0.50±0.25
MS06 (1206)	1W	3,4,5,7,7.5,8.2,10,15,20,25,30	2,3,4,5,7,7.5,8.2,10,15,20,25,30	±150	3.10±0.20	1.60±0.30	0.70±0.20	≤1.00	0.50±0.25
MS07 (1210)	1.5W	4,5,6	4,5,6	±20	3.10±0.20	2.50±0.25	0.70±0.20	≤1.00	0.65±0.25
MS10 (2010)	1.5W	2,3,4,5,8,10,16,18,20,22,24,25,30,33,36,40,50,100	2,3,4,5,8,10,16,18,20,22,24,25,30,33,36,40,50,100	±50	5.00±0.20	2.50±0.25	0.70±0.20	≤1.00	1.00±0.30
MS11 (1812)	2W	2,10,20,50,100	2,10,20,50,100	±20	4.40±0.20	3.20±0.25	0.70±0.20	≤1.00	0.80±0.30
MS12 (2512)	3W	1	1	±50	6.35±0.20	3.20±0.25	0.70±0.20	≤1.00	0.70-2.00 ±0.30
	3W	2,3,4,5,6,7,8,10,11,12,15,16,17,18,20,22,25,27,30,33,35,36,37,39,40,43,45,47,50,51,52,53,60,65,68,70,75,80,82,91,100,150,200	2,3,4,5,6,7,8,10,11,12,15,16,17,18,20,22,25,27,30,33,35,36,37,39,40,43,45,47,50,51,52,53,60,65,68,70,75,80,82,91,100,150,200	±30					
MS17 (2817)	3W	4,6,8,9,1,10,15,20,30	4,6,8,9,1,10,15,20,30	±30	7.10±0.20	4.20±0.20	0.70±0.20	≤1.00	1.10±0.30
MS20 (4320)	3W	10,15,20,40,50	10,15,20,40,50	±30	11.00±0.30	5.00±0.25	0.65±0.20	≤1.00	2.50±0.30
MS27 (4527)	5W	1,2,3,4,5,8.2,10,11,15,20,25,27,30,40,47,50	1,2,3,4,5,8.2,10,11,15,20,25,27,30,40,47,50	±30	11.60±0.30	6.70±0.25	0.60±0.20	≤1.00	2.50±0.30

Note: Other sizes and resistor values can be customized on request

## Derating Curve

