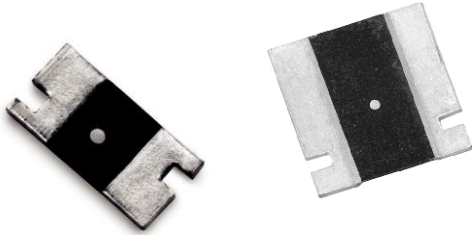


Bulk Metal[®] Technology High Precision, Current Sensing, Power Surface Mount, Metal Strip Resistor with Resistance Value from 2 mΩ, Rated Power up to 3 Watts and TCR to 0 ± 15 ppm/°C

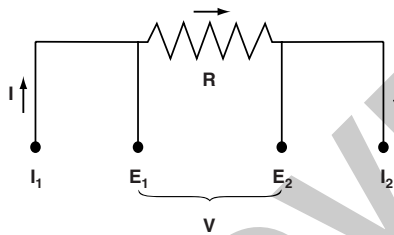


Any value at any tolerance available within resistance range

The CSM Series of low value current sense resistors provides power and precision in a four terminal, surface mount configuration. Its all welded construction is made up of a Bulk Metal[®] resistive element with plated copper terminations.

Our Application Engineering Department is available to advise and make recommendations.

For non-standard technical requirements and special applications, please contact us.



FEATURES

- Temperature Coefficient: ± 15 ppm/°C max. (- 55 °C to + 125 °C, + 25 °C Ref.) (see table 1)
- Power Rating: 1 to 3 Watts
- Tolerance: ± 0.1 %
- Resistance Range: 2 mΩ to 200 mΩ
- Short Time Overload: ± 0.1 % typical
- Thermal EMF: 3 μV/°C
- Maximum Current: up to 38 Amps
- Surface Mount Configuration
- Four Terminal (Kelvin) Design: allows for precision accurate measurements
- Terminal Finishes Available: Lead (Pb)-free Tin/Lead Alloy
- For better performance please contact us



FIGURE 1 - POWER DERATING CURVE

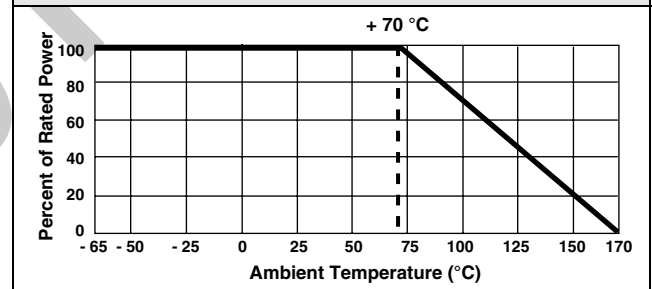


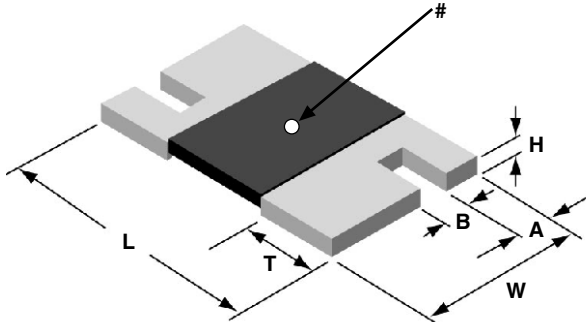
TABLE 1 - PERFORMANCE SPECIFICATIONS

PARAMETER	CSM2512	CSM3637
Resistance Range	3 mΩ - 200 mΩ	2 mΩ - 200 mΩ
Power Rating at 70 °C	1 Watt	3 Watts (2 mΩ - 10 mΩ) 2 Watts (> 10 mΩ - 200 mΩ)
Maximum Current	18 Amps	38 Amps
Tightest Tolerance	± 0.1 %	
Temperature Coefficient Max (- 55 °C to + 125 °C, + 25 °C Ref.)	± 15 ppm/°C	± 25 ppm/°C (2 mΩ - < 3 mΩ) ± 15 ppm/°C (3 mΩ - 200 mΩ)
Operating Temperature Range	- 55 °C to + 125 °C; Ref. + 25 °C	
Weight (maximum)	0.09 grams	0.29 grams

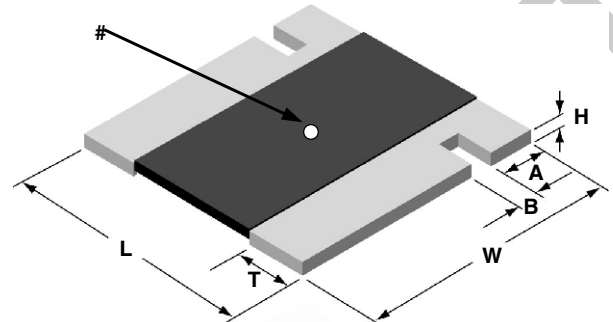
* Pb containing terminations are not RoHS compliant, exemptions may apply

FIGURE 2 - DIMENSIONS AND IMPRINTING in inches (millimeters)

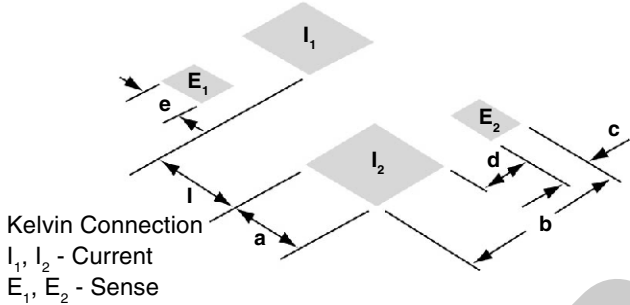
CSM2512 DIMENSIONS



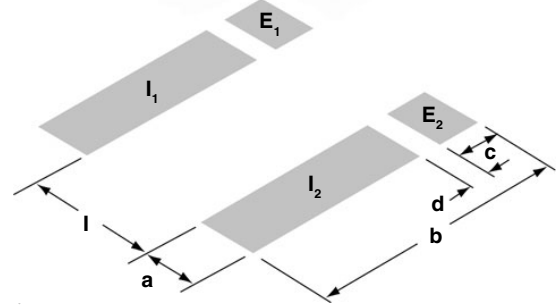
CSM3637 DIMENSIONS



CSM2512 LAND PATTERN



CSM3637 LAND PATTERN



DIMENSIONS - TOLERANCES ± 0.010 (± 0.254), * ± 0.015 (± 0.381)

MODEL	RESISTANCE RANGE, mΩ	L	W	H	T	A	B
CSM2512	3 to < 5	0.25 (6.35)	0.125 (3.175)	0.025 (0.635)	0.083 (2.108)	0.030* (0.762)	0.025* (0.635)
	5 to < 7				0.047 (1.194)		
	7 to 200				0.032 (0.813)		
CSM3637	2 to 200	0.360 (9.14)	0.370 (9.4)	0.025 (0.635)	0.086 (2.18)	0.061 (1.55)	0.032 (0.813)

LAND PATTERN DIMENSIONS - TOLERANCES ± 0.003 (± 0.076)

MODEL	a	b	c	d	e	l
CSM2512	0.125 (3.18)	0.130 (3.30)	0.030 (0.76)	0.020 (0.51)	0.055 (1.40)	0.065 (1.65)
CSM3637	0.116 (2.95)	0.390 (9.91)	0.066 (1.68)	0.244 (0.61)	-	0.178 (4.52)

Note
 • White dot indicates top side of part for mounting purposes

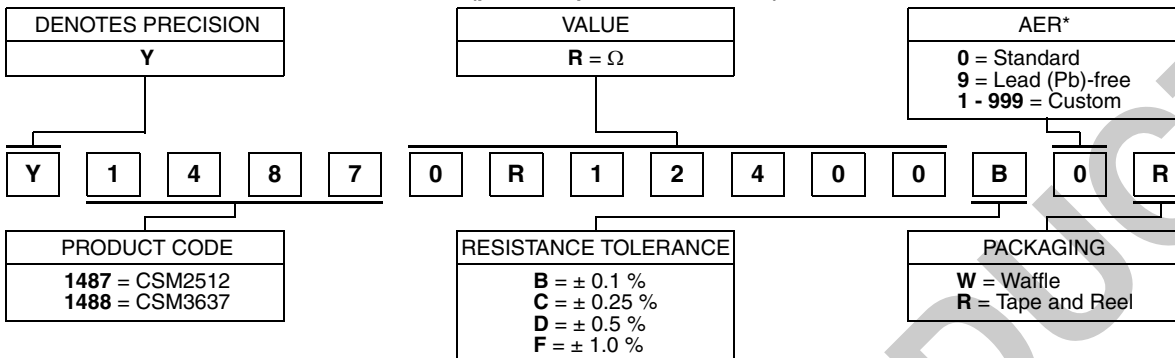


Bulk Metal® Technology High Precision, Current Sensing,
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 from 2 mΩ, Rated Power up to 3 Watts and TCR to 0 ± 15 ppm/°C

Vishay Foil Resistors

TABLE 2 - GLOBAL PART NUMBER INFORMATION

NEW GLOBAL PART NUMBER: Y14870R12400B0R (preferred part number format)



Note

* For non-standard requests, please contact application engineering.

FOR EXAMPLE: ABOVE GLOBAL ORDER Y1487 0R12400 B 0 R:

TYPE: CSM2512

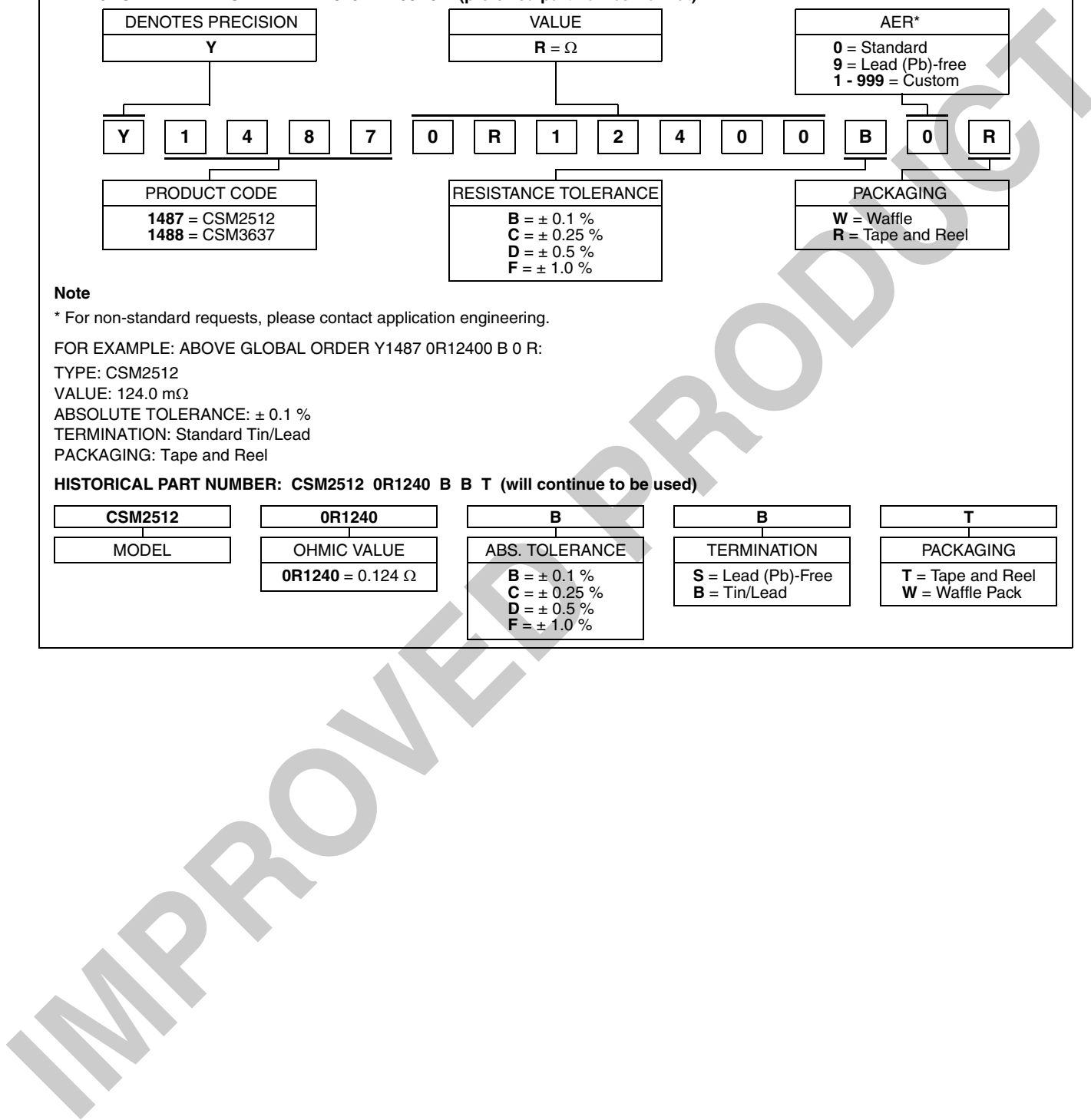
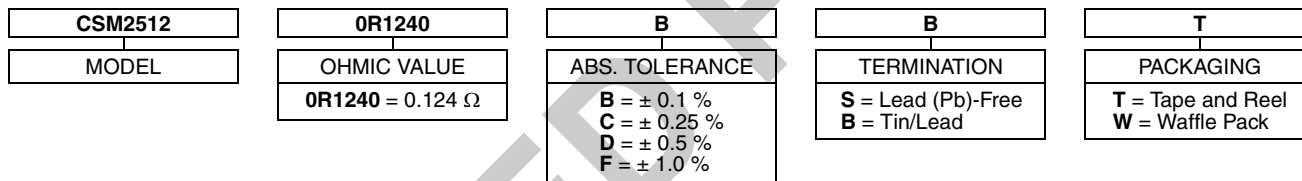
VALUE: 124.0 mΩ

ABSOLUTE TOLERANCE: ± 0.1 %

TERMINATION: Standard Tin/Lead

PACKAGING: Tape and Reel

HISTORICAL PART NUMBER: CSM2512 0R1240 B B T (will continue to be used)





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