

# **CURRENT SENSE – Molded Current Sense Resistors**

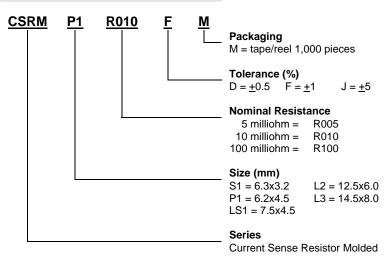


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## CSRM-S1/CSRM-P1/CSRM-L1S/CSRM-L2/CRSM-L3 Series

Custom solutions are available.

## **HOW TO ORDER**

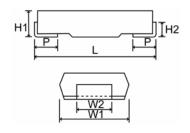




## **FEATURES**

- Excellent for current sensing applications
- Flameproof UL94-V-0 molded polymer case
- Resistors has a height as small as 1mm
- Non-Inductive for improved frequency characteristics
- Resistance tolerance available as precise as ± 0.5%
- Compact and light weight ideal for surface mounting
- Applicable Specs: MIL-R-55342D & MIL-R-202
- RoHS Compliant

#### **SCHEMATIC**



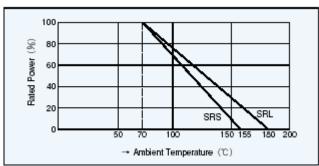
#### **CHARACTERISTICS**

Model	Power Rating		Resistance					
		L ±0.5	W1 ±0.3	W2 ±0.3	H1 ±0.3	H2 ±0.3	$P\pm0.3$	Range m $\Omega$
CSRM-S1	1 watt	6.3	3.2	2.5	1.0	0.8	0.8	3 ~ 100
CSRM-P1	1 watt	6.2	4.5	2.5	1.0	0.6	1.2	3 ~ 100
CSRM-LS1	1 watt	7.5	4.5	2.5	2.0	1.1	1.2	3 ~ 510
CSRM-L2	2 watt	12.5	6.0	4.0	3.0	1.5	2.0	5 ~ 1,000
CSRM-L3	3 watt	14.5	8.0	6.0	3.0	1.5	2.0	8 ~ 1,800

#### **PERFORMANCE**

Item	Test Method			
Operating Temperature Range	-55°C ~ +155°C for CSRM-S and CSRM-P Series -55°C ~ +180°C for CSRM-L Series			
Resistance Temperature Characteristics	±100ppm/°C			
Overload	±0.5% at rated power x5/second			
Insulation Resistance	>100MΩ at DC 100V			
Dielectric withstanding Voltage	±0.2%, AC500V for 1 minute			
Resistance to Soldering Heat	±0.5%, 260°C for 5 seconds			
Moisture Resistance	±0.5% for 1,000 hours			
Load Life	±1.0% for 1,000 hours			

#### **DERATING CURVE**



188 Technology Drive, Unit H, Irvine, CA 92618 TEL: 949-453-9888 ◆ FAX: 949-453-8889



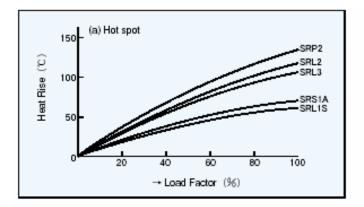


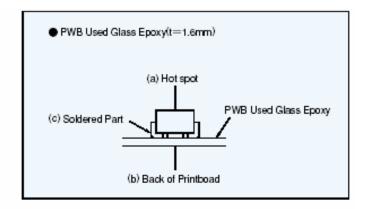
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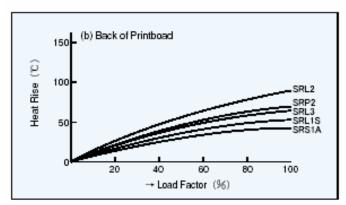
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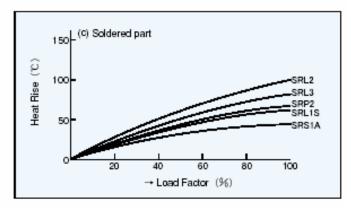


#### **HEAT RISE CURVE**

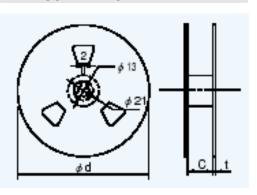




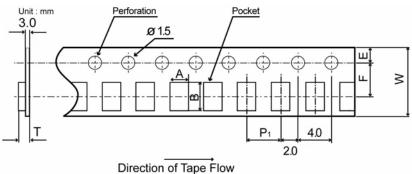




#### **REEL SCHEMATIC**



## TAPE SCHEMATIC



Direction of 1

## **PACKAGING SPECIFICATIONS**

Model	Reel Specification (mm)			Embossed Tape Specifications (mm)						
	Ød	С	t	Α	В	W	F	E	P <sub>1</sub>	Т
CSRM-S1	180	13.0	1.2	3.7	6.8	12.0	5.5	1.75	8.0	1.5
CSRM-P1	180	13.0	1.2	5.0	6.9	12.0	5.5	1.75	8.0	1.4
CSRM-LS1	180	17.5	1.5	5.1	8.2	16.0	7.5	1.75	8.0	2.5
CSRM-L2	254	25.5	2.0	6.6	13.2	24.0	11.5	1.75	8.0	3.5
CSRM-L3	330	25.5	2.0	8.6	15.2	24.0	11.5	1.75	12.0	3.5

## LABEL DESCRIPTION

One side surface of a reel is marked with a label with the following items of information.

- 1. Chip Resistor
- 2. Part Number
- 3. Tolerance
- 4 Quantity
- 5. Lot number for production month/year/suffix L\*
- 6. Manufacturer's name or symbol



<sup>\*</sup> The suffix "L" indicates that this item is lead free. As of September 2004, all new production items of the series CSRM are no longer containing tin/lead (SnPb) terminals; they are lead free and in compliance with Lead Free/RoHS.