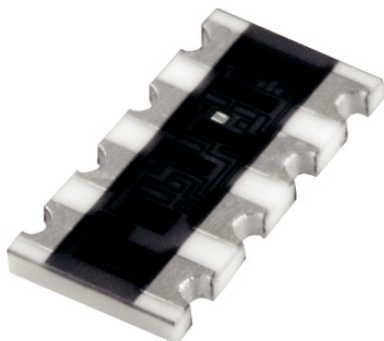


## Surface Mount Thin Film Single Layer Resistor Array



Product may not be to scale

### FEATURES

- Standard chip sizes 0.100", 0.150", 0.210" wide
- Custom chip sizes up to 0.500" x 0.500"
- Custom chip sizes up to 0.500" x 0.500"
- Case: 0510 to 2010
- Mixed values to 500 k $\Omega$
- Multiple reference resistor groups
- Ratio tolerance to  $\pm 0.05\%$
- Ratio TCR's to  $\pm 1$  ppm/ $^{\circ}\text{C}$
- Nichrome resistor material standard. Tantalum nitride available, consult factory
- Custom pad spacing 0.025" or greater

SLR (single layer resistor carrier) networks are offered to provide the user with a leadless device that maximizes board density while maintaining tight ratio tolerances and TCR tracking. Pads are provided top and bottom connected by edge castellations for ease of visual solder joint inspection. Resistors can be covered with Vishay Electro-Films (EFI) proprietary thermal set plastic for physical protection or left uncoated to facilitate user trimming.

SLR's are provided with 0.050" standard contact spacing; however, 0.025" contact spacing is also available. The standard contact metallization is gold flash over nickel plate. Solder coated contacts can be provided if preferred. Custom configurations, values, and tolerance combinations are available with fast turnaround.

### TEMPERATURE COEFFICIENT OF RESISTANCE, VALUES, AND TOLERANCES

PARAMETER	VALUE	UNIT
Total Resistance Range	10 to 500K	$\Omega$
Standard Tolerance	$\pm 0.1$ to $\pm 1$	%
TCR	$\pm 50$ ; available to $\pm 10$	ppm/ $^{\circ}\text{C}$

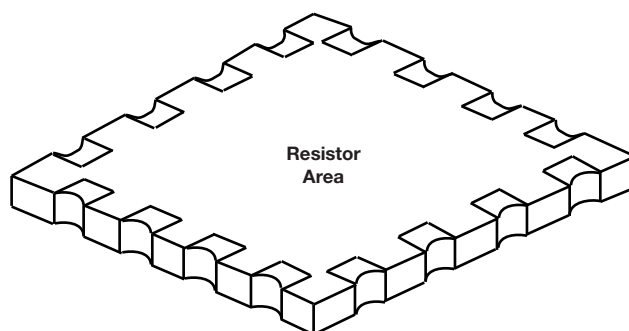
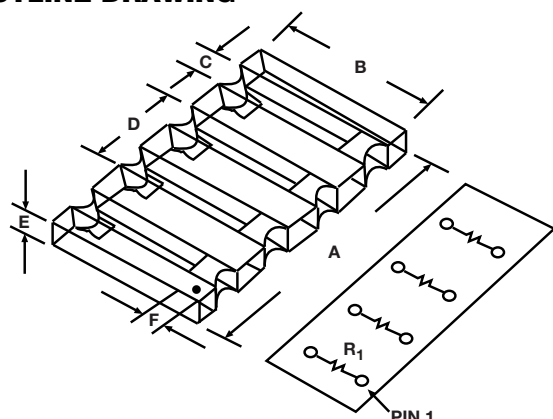
### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE	UNIT
Absolute Resistance Tolerance	$\pm 0.1$ to $\pm 1$	%
Resistance Ratio Tolerance	$\pm 0.05$ to $\pm 0.1$	%
Ratio TCR	$\pm 5$ available to $\pm 1$	ppm/ $^{\circ}\text{C}$
Absolute Resistor Stability (Mean)	300 per 1000 h at 125 $^{\circ}\text{C}$ typ.	ppm
Ratio Resistor Stability (Mean)	18 per 1000 h at 125 $^{\circ}\text{C}$ typ.	ppm
Temperature Range	0 to + 70, - 40 to + 85, - 55 to + 125	$^{\circ}\text{C}$
DC Power Rating at 70 $^{\circ}\text{C}$	0.1	W
DC Power Rating at 125 $^{\circ}\text{C}$	0.05	W

The SLR construction allows for a wide selection of special sizes and shapes with rapid turnaround and low NRE costs. The holes for the edge castellations are laser drilled into a multiple-up, large area substrates in-house prior to metallization. This permits new configurations with only laser software and a mask set.

Custom parts can be provided with combinations of features listed:

1. Any combination of resistor values between 100  $\Omega$  and 100 k $\Omega$  in the standard sizes.
2. Custom resistor network patterns (no crossovers).
3. A wide variety of rectangular sizes and shapes with contact pads on two to four sides.
4. Pad center-to-center spacings from 0.025" (0.635 mm) and larger.
5. Uncoated to permit customer trimming.

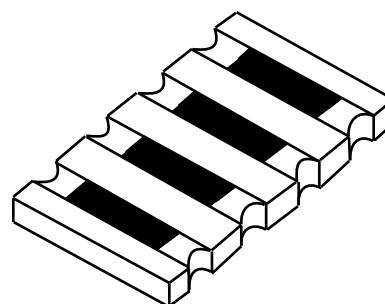
**OUTLINE DRAWING**


Single Layer 16 Pin Chip Carrier  
Chip measures 0.300" x 0.300".  
Castellations are on 0.050" (1.27 mm) centers.  
(Special Order)

DIMENSIONS in inches [millimeters]						
CENTERS	A	B	C	D	E	F
0.025 [0.64]	(1)	0.100 [2.54]	0.015 [0.38]	0.025 [0.64]	0.015 [0.38]	0.020 [0.51]
0.050 [1.28]	(2)	0.100 [2.54]	0.030 [0.76]	0.050 [1.28]	0.015 [0.38]	0.020 [0.51]
0.050 [1.28]	(2)	0.150 [3.84]	0.030 [0.76]	0.050 [1.28]	0.025 [0.64]	0.020 [0.51]
0.050 [1.28]	(2)	0.210 [5.37]	0.030 [0.76]	0.050 [1.28]	0.025 [0.64]	0.020 [0.51]

**Notes**

- (1) 0.025" [0.64 mm] per resistor, 2 to 18 pads  
(2) 0.050" [1.28 mm] per resistor, 2 to 18 pads



Standard Pitch: Castellations are  
on 0.050" (1.27 mm) centers  
(0.025" pitch special order)

**ORDERING INFORMATION**

Global Part Number: SLRC410001FFCGGS

Global Part Number Description: SLRC 4 RES 10K 1 % RT 1 % 50 ppm 2 ppm Au WS

S	L	R	C	4	1	0	0	0	1	F	F	C	G	G	W	S
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

MODEL	WIDTH (mil)	NUMBER RESISTORS	RESISTANCE	RES. MULTIPLIER CODE	TOL. CODE (%)	RATIO TOL. (%)	TCR (ppm/°C)	TC TRACK (ppm/°C)	TERMINATION	PACKAGING CODE
<b>SLR</b> Resistor Carrier NiCr on Alumina	<b>C</b> = 100 <b>N</b> = 150 <b>M</b> = 210	<b>2</b> = 2 <b>3</b> = 3 <b>4</b> = 4 <b>7</b> = 7 <b>8</b> = 8	First 4 digits are significant figures of resistance	<b>B</b> = 0.01 <b>A</b> = 0.1 <b>0</b> = 1.0 <b>1</b> = 10.0 <b>2</b> = 100.0	<b>B</b> = 0.1 <b>C</b> = 0.25 <b>D</b> = 0.5 <b>F</b> = 1.0 <b>G</b> = 2.0 <b>J</b> = 5.0 <b>K</b> = 10.0	<b>W</b> = 0.01 <b>V</b> = 0.02 <b>A</b> = 0.05 <b>B</b> = 0.1 <b>C</b> = 0.25 <b>D</b> = 0.5 <b>F</b> = 1.0 <b>G</b> = 2.0	<b>B</b> = ± 10 <b>E</b> = ± 25 <b>C</b> = ± 50 <b>K</b> = ± 100 <b>M</b> = ± 250	<b>F</b> = ± 1 <b>G</b> = ± 2 <b>H</b> = ± 3 <b>J</b> = ± 5 <b>K</b> = ± 10	<b>G</b> = Au <b>S</b> = SnPb <b>T</b> = Lead (Pb)-free (e1)	<b>WS</b> = Waffle pack 100 min., 1 mult



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