



# Type CHS High Resistance Thick Film Chip Resistors



- High Value Thick Film Resistance Element
- Resistance From 10MΩ to 1TΩ
- Tolerances to ± 1%
- TCR's to ± 25 ppm/°C
- Available Trimmed and Untrimmed
- Sizes; 0402, 0603, 0805, 1206, 1210, 2512, 4020

Riedon's new precision chip resistors use thick film resistance layers, and PtAg contact areas for soldering or conductive glueing. This ensures a highly stable and reliable resistor. Standard measuring voltage is 10V.

## SPECIFICATIONS

CHS Size	0402	0603	0805	1206	1210	2512	4020	
<b>Power Rating (mW) <sup>(1)</sup></b>	50	75	125	250	350	600	800	
<b>Working Voltage</b> <i>Trimmed (Untrimmed)</i>	30 (90)	75 (200)	100 (300)	200 (600)	300 (900)	1000(2000)	4000(6000)	
	<b>TCR's Available ( ± ppm/°C )</b>							
<b>Resistance</b>	<b>VCR ( %/ V )</b>							
<b>Tolerance (±%) *</b>								
10M - 100M	0.5% to 20%	100, 250	100, 250	50, 100	50, 100	50, 100	50, 100	25, 50, 100
		<0.2%/V	<0.1%/V	<0.05%/V	<0.05%/V	<0.02%/V	<0.02%/V	<0.01%/V
>100M - 1G	1% to 20%	250, 500	250, 500	250, 500	100, 250	100, 250	100, 250	25, 50, 100
		<0.5%/V	<0.2%/V	<0.15%/V	<0.1%/V	<0.05%/V	<0.02%/V	<0.01%/V
>1G - 10G	2% to 30%	1000,2000	500,1000	500,1000	500,1000	250, 500	250, 500	50, 100
		<1%/V	<0.5%/V	<0.5%/V	<0.2%/V	<0.1%/V	<0.05%/V	<0.02%/V
>10G - 100G	5% to 30%	-	500,1000	500,1000	500,1000	250, 500	250, 500	100, 250
			<1%/V	<1%/V	<0.5%/V	<0.2%/V	<0.1%/V	<0.05%/V
>100G - 1T	5% to 30%	-	-	1000,2000	1000,2000	500,1000	500,1000	250, 500
				<2%/V	<1%/V	<0.5%/V	<0.2%/V	<0.1%/V

\* Not All Tolerances available in all package size & ohmic value combinations - Consult Factory

<sup>(1)</sup> mW @ 70°C, 0mW @ 125°C

**Temperature Range -** -55°C to 125°C

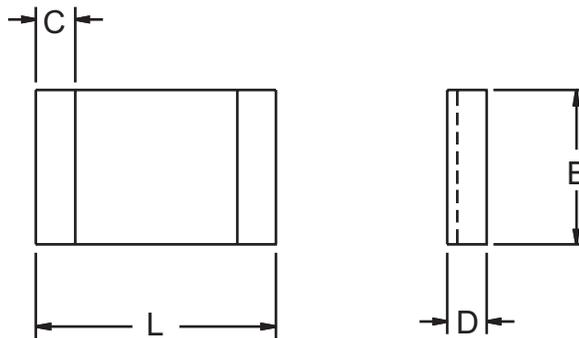
**Climatic Category -** 55/125/56

**Solderability -** 235°C, 5 Seconds

**Max. Soldering Temperature -** 260°C, 10 Seconds

Long Term Stability	< 100M $\Omega$	100M $\Omega$ - < 1G $\Omega$	$\geq$ 1G $\Omega$
Storage 125°C / 1000h	<1%	<2%	<5%
Maximum Voltage / 1000h	<0.5%	<1%	<2%

### DIMENSIONS



Size	L	B	D	C
CHS0402	1.04 $\pm$ 0.05	0.5 $\pm$ 0.05	0.3 $\pm$ 0.05	0.1 $\begin{smallmatrix} +0.1 \\ -0.05 \end{smallmatrix}$
CHS0603	1.5 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.8 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.4 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.2 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$
CHS0805	2.0 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	1.2 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.4 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.3 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$
CHS1206	3.2 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	1.5 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.4 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.3 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$
CHS1210	3.2 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	2.5 $\begin{smallmatrix} +0.20 \\ -0.05 \end{smallmatrix}$	0.5 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.8 $\pm$ 0.2
CHS2512	6.3 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	3.5 $\begin{smallmatrix} +0.20 \\ -0.05 \end{smallmatrix}$	0.6 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	0.9 $\pm$ 0.2
CHS4020	10.2 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	5.1 $\begin{smallmatrix} +0.20 \\ -0.05 \end{smallmatrix}$	0.6 $\begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$	1.0 $\pm$ 0.2

Units: mm per CECC40400

#### Packaging:

Bulk or Tape & Reel per IEC 286-3 / EIA 481-1-A

Tape width 8mm, Reel diameter 180 or 330mm  
 Minimum quantity Bulk, 100 pieces per value  
 Minimum quantity Tape & Reel, 1000 pieces per value

#### Ordering information:

Type/Size - Resistance - Tolerance - TCR - Packaging ( if not Bulk )

Example: **CHS2512 - 10G - 10 - 250 - Tape**  
 ( Note: if no TCR is specified, the highest value will be supplied )