

# GST Series

## High Value Resistors, Radial Leaded

Sizes: 1210, 2512, 4020

### Features:

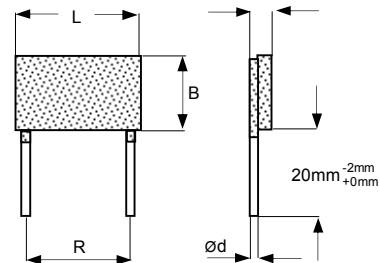
- High Value Resistors in thick film technology
- Variable lead spacing
- Resistance values up to 1 Tera-Ohm
- Excellent values of tolerance, TCR and VCR
- Untrimmed for higher working voltage
- Climatic protection by lacquer coating
- Non-magnetic



### Dimensions:

Size	L	B	D	R	d
1210	3.2	2.5	0.9	2.0	0.40 <sup>+0.05</sup>
2512	6.3	3.5	1.0	5.5	0.40 <sup>+0.05</sup>
4020	10.2	5.1	1.0	9.5	0.40 <sup>+0.05</sup>

L = Length, B = Width, D = Thickness (Tolerance of dimensions:  $\pm 0.5$  mm)  
d = Standard wire diameter (in mm), other diameters possible  
R = Standard lead spacing (other spacing possible by bending)



### Packaging:

Bulk in plastic bags  
Minimum quantity: 100 pieces per value

### Ordering Data:

Type – value – tolerance – TCR  
Example: GST 4020 10G  $\pm 10\%$  TCR 100

Untrimmed parts are indicated by the extension “NA” in the order code:  
Type – value – tolerance – NA – TCR - packaging  
Example: GST 4020 10G  $\pm 10\%$  NA TCR 100

If no requirement for TCR is given, the standard value (highest value in table) will be supplied.  
Standard measuring voltage is 10V (50V for values >1G). Different voltages on request and agreement (specify explicitly).

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### Technical data – depending on size:

Size	1210	2512	4020
Power Rating $P_{70}(W)$ ( $P_{125} = 0W$ )	0.5	1.0	2.0
Working Voltage $U_{-}, U_{eff} (V)$ <sup>3)</sup> trimmed untrimmed (Tol. $\geq 5\%$ )	300 1000	1200 2500	4000 6000

Ranges / Tolerances / TCR <sup>1)</sup> / VCR <sup>2)</sup>			
1M – 100M	0.5/1/2/5/10% TC 25/50/100 50 ppm/V	0.5/.../10% TC 25/50/100 10 ppm/V	0.25/.../10% TC 25/50/100 5 ppm/V
>100M – 500M	2/5/10/20% TC 50/100/250 100 ppm/V	1/2/5/10/20% TC 25/50/100 25 ppm/V	0.5/1/2/5/10/20% TC 25/50/100 10 ppm/V
>500M – 1G	5/10/20% TC 100/250 100 ppm/V	1/2/5/10/20% TC 100/250 25 ppm/V	1/2/5/10/20% TC 25/50/100 10 ppm/V
>1G – 10G	5/10/20/30% TC 250/500 500 ppm/V	2/5/10/20% TC 100/250 100 ppm/V	2/5/10/20% TC 50/100 25 ppm/V
>10G – 100G	5/10/20/30% TC 500/1000 1000 ppm/V	5/10/20/30% TC 250/500 250 ppm/V	5/10/20/30% TC 100/250 100 ppm/V
>100G – 1T	–	10/20/30/50 TC 1000 500 ppm/V	5/10/20/30% TC 500 250 ppm/V

<sup>1)</sup> TCR: in ppm/K; Temp.range + 25°C...+ 125°C; TCR25/50 and values above 1G: Temp.range +25°C...+85°C

<sup>2)</sup> VCR: typical values

<sup>3)</sup> Continuous operating voltage:  $U = \sqrt{P \cdot R}$

Lower values of tolerance, TCR and VCR as well as higher resistance values on request and agreement

### Technical data – general:

Operating temperature range	-55°C ... +125°C
Climatic category acc. to EN 60068-1	55/125/56
Humidity- / contact protection	Lacquer coating <sup>4)</sup>

Long term stability	$\leq 1G$	$\leq 10G$	>10G
Storage 125°C/1000h	<1%	<2%	<5%
Max voltage/1000h	<0.5%	<1%	<2%

<sup>4)</sup> Resistant to most solvents. For cleaning the use of isopropyl alcohol (IPA) is recommended.  
The use of acetone and methylene chloride is **not** allowed.