

GST-Series

High Value Resistors, radial leaded

Sizes: 1210, 2512, 4020

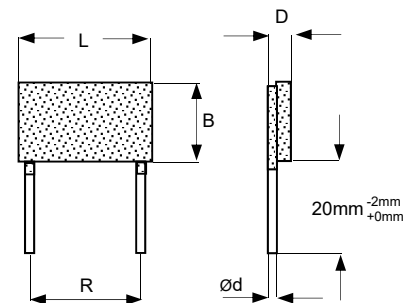
Features:

- High value resistors in thick film technology
- Resistance values up to 1 Tera-Ohm
- Excellent values of tolerance, temperature coefficient and VCR
- Untrimmed for higher working voltage
- Variable lead spacing
- Climatic protection by Silicone coating (conformal coating)
- Non-magnetic



Dimensions:

Size	L	B	D	R	d
1210	3.2	2.5	0.9	2.0	0.40 ±0.05
2512	6.3	3.5	1.0	5.5	0.40 ±0.05
4020	10.2	5.1	1.0	9.5	0.40 ±0.05



L = Length, B = Width, D = Thickness (Tolerance of dimensions: ± 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: 30 pieces per value

Ordering Data:

Type – value – tolerance – temperature coefficient TK

Example: *GST 4020 10G ±10% TK100*

Untrimmed parts are indicated by the extension “NA” in the order code:

Type – NA – value – tolerance – temperature coefficient TK

Example: *GST 4020-NA 10G ±10% TK100*

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) ³⁾ trimmed untrimmed (Tol. ≥ 5%)	800 1200	2000 3000	4000 6000

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

¹⁾ Temperature coefficient TK: in ppm/K; +25°C...+125°C; lower than standard (highest TK) or value >100G: 25°C...+85°C

²⁾ VCR: typical values, all negative, not for all TK values available

³⁾ Continuous operating voltage (U₋, U_{eff}): $V \leq \sqrt{P \cdot R}$ or max. working voltage (the lower value)

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

Technical data – general:

Operating temperature range	-55°C ... +150°C		
Climatic category acc. to EN 60068-1	55/150/56		
Humidity- / contact protection	Silicone conformal coating ⁴⁾		
Long term stability	≤1G	≤10G	>10G
Storage 125°C/1000h	<1%	<2%	<5%
Max voltage/1000h	<0.5%	<1%	<2%

⁴⁾ Resistant to most solvents. For cleaning the use of isopropyl alcohol (IPA) is recommended. The use of acetone and methylene chloride is **not** allowed. Mechanical stress to coating should be avoided, no use of high pressure cleaning.

Other data according to EN 140401-802 (CECC 40401-802).