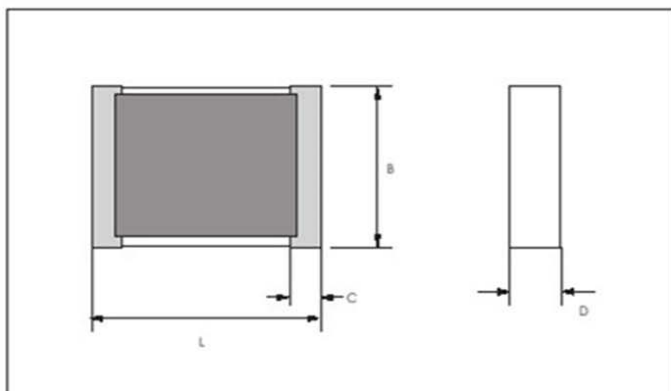




## Construction



## Features

- High value chip resistors in thick film
- Low temperature and voltage dependency
- Contact areas PtAg for gluing and soldering
- Untrimmed for higher voltage application up to 6000V

## Applications

- Analysing instruments and meters
- Computers and telecom and wireless
- Military electronic equipments
- Medical electronic applications  
For example: X-Ray machine Neutronic or high voltage devices, etc)

## Reference Standards

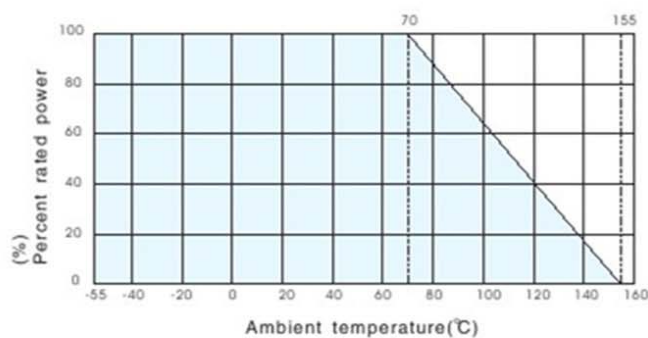
Q/DRT003—2008

## Dimensions(mm)

Type	L	B	D	C
0402	1.04 <sup>+0.05</sup>	0.50 <sup>+0.05</sup>	0.30 <sup>+0.05</sup>	0.1 <sup>+0.1/-0.05</sup>
0603	1.50 <sup>+0.15/-0.05</sup>	0.80 <sup>+0.15/-0.05</sup>	0.40 <sup>+0.15/-0.05</sup>	0.2 <sup>+0.2/-0.1</sup>
0805	2.00 <sup>+0.15/-0.05</sup>	1.25 <sup>+0.15/-0.05</sup>	0.40 <sup>+0.15/-0.05</sup>	0.3 <sup>+0.2/-0.1</sup>
1206	3.20 <sup>+0.15/-0.05</sup>	1.50 <sup>+0.2/-0.05</sup>	0.40 <sup>+0.15/-0.05</sup>	0.3 <sup>+0.2/-0.1</sup>
1210	3.20 <sup>+0.15/-0.05</sup>	2.50 <sup>+0.2/-0.05</sup>	0.50 <sup>+0.15/-0.05</sup>	0.8 <sup>+0.2</sup>
2512	6.30 <sup>+0.15/-0.05</sup>	3.50 <sup>+0.2/-0.05</sup>	0.60 <sup>+0.15/-0.05</sup>	0.9 <sup>+0.2</sup>
4020	10.20 <sup>+0.15/-0.05</sup>	5.10 <sup>+0.2/-0.05</sup>	0.60 <sup>+0.15/-0.05</sup>	0.9 <sup>+0.2</sup>

L=Length, B=Width, D=Thickness,  
C=Width of wraparound ( in mm )

## Derating Curve



## Technical Specifications

Type	Power rating P <sub>N</sub> (mW)	Working voltage(V)		Resistance ranges/Tolerances/TCR(ppm/°C) <sup>1)</sup> /VCR					
		trimmed	untrimmed	10M-100M	100M-500M	500M-1G	1G-10G	10G-100G	100G-1T
0402	50	30	90	5/10/20% TC50/100 < 500ppm/V	5/10/20% TC100/250 < 1000ppm/V	5/10/20% TC250/500 < 1000ppm/V	10/20/30% TC1000/2000 < 2000ppm/V	/	/
0603	75	75	200	1/5/10/20% TC50/100 < 250ppm/V	2/5/10/20% TC100/250 < 500ppm/V	5/10/20% TC250/500 < 500ppm/V	5/10/20/30% TC500/1000 < 2000ppm/V	10/20/30% TC1000/2000 < 10000ppm/V	10/20/30% Tc3000 < 5000ppm/V
0805	125	100	300	0.5/1/5/10/20% TC50/100 < 100ppm/V	2/5/10/20% TC100/250 < 250ppm/V	5/10/20% TC250/500 < 250ppm/V	5/10/20% TC500/1000 < 1000ppm/V	10/20/30% TC1000/2000 < 5000ppm/V	10/20/30% TC3000 < 10000ppm/V
1206	250	200	600	0.5/1/5/10/20% TC25/50/100 < 100ppm/V	2/5/10/20% TC50/100/250 < 100ppm/V	5/10/20% TC100/250 < 250ppm/V	5/10/20% TC500/1000 < 1000ppm/V	10/20/30% TC1000/2000 < 2000ppm/V	10/20/30% TC3000 < 5000ppm/V
1210	350	300	900	0.5/1/5/10/20% TC25/50/100 < 50ppm/V	2/5/10/20% TC50/100/250 < 100ppm/V	5/10/20% TC100/250 < 100ppm/V	5/10/20% TC250/500 < 500ppm/V	5/10/20% TC500/1000 < 1000ppm/V	5/10/20/30% TC1000/2000 < 2000ppm/V
2512	1000 <sup>1)</sup>	1000	2000	0.5/.../20% TC25/50/100 < 10ppm/V	1/5/10/20% TC25/50/100 < 25ppm/V	1/5/10/20% TC100/250 < 25ppm/V	2/5/10/20% TC250/500 < 100ppm/V	5/10/20% TC250/500 < 250ppm/V	5/10/20% TC500/1000 < 500ppm/V
4020	1500 <sup>1)</sup>	4000	6000	0.25/.../10% TC25/50/100 < 5ppm/V	0.5/1/5/10/20% TC25/50/100 < 10ppm/V	1/5/10/20% TC25/50/100 < 10ppm/V	2/5/10/20% TC50/100 < 25ppm/V	5/10/20/30% TC100/250 < 100ppm/V	5/10/20/30% TC250/500 < 250ppm/V

<sup>1)</sup>At continuous power dissipation the dimensions of solder-pads have to secure sufficient heat-conduction.

<sup>2)</sup>TC25/50: Temperature range +25°C~+85°C

Lower values of tolerance, TCR and VCR on request and agreement.

## Performance

Temperature range	Climatic category acc IEC 60068	Solderability acc. IEC60068-2-58 <sup>1)</sup>	Max. Soldering temperature acc. IEC60068-2-58
-55°C~155°C	55/155/56	235°C 2s	260°C 10s

Long term stability	Storage 125°C/1000h	最大电压/1000h Max voltage/1000h
< 1G	< 1%	< 0.5%
< 10G	< 2%	< 1%
≥ 10G	< 5%	< 2%

<sup>1)</sup>Up to 6 months after shipment request, at storage in Nitrogen  
Data not specified according to CECC40401-802

## How To Order

Example

CHS	0805	125mW	100KΩ	± 5%	± 100ppm	tape/bag
Type	Style	Power	Nominal Value	Tolerance	TCR	Packaging
CHS	0402 0603 0805 1206 1210 2512 4020	50mW 75mW 125mW 250mW 350mW 1000mW 1500mW	100MΩ	± 0.25% ± 0.5% ± 1% ± 2% ± 5% ± 10% ± 20% ± 30%	± 25ppm ± 50ppm ± 100ppm ± 250ppm ± 500ppm ± 1000ppm ± 2000ppm ± 3000ppm	tape bag

If no requirements for TCR and taping, the standard TCR (highest value in table) will be supplied and packaging is bulk.