

Component General, Inc.

■ Microwave Carbon Rod Resistors

■ MECHANICAL SPECIFICATIONS



Substrate: Alumina or Beryllium Oxide Ceramic (Note: Letter "P" Denotes Beryllium Oxide.)

Std. Tolerance: Standard Resistance Tolerance $\pm 2\%$ at 25°C

Terminals: Terminal Areas are Nickel/Tin Plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range: -55°C to +200°C.

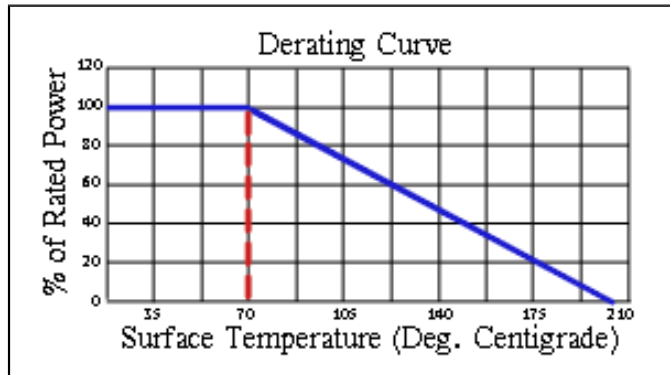
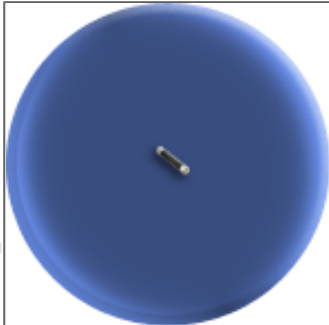
high power carbon rod resistors product selection chart

P/N	Nominal Power	O.D.	Length	Terminal
C40R115	1/10 W	0.039" - 0.044"	0.110" - 0.120"	0.020" - 0.040"
C60R120P	10 W	0.057" - 0.065"	0.115" - 0.127"	0.020" - 0.040"
C62R187	1/8 W	0.060" - 0.066"	0.181" - 0.193"	0.040" - 0.070"
C62R187P	10 W	0.060" - 0.066"	0.181" - 0.193"	0.040" - 0.070"
C62R375P	10 W	0.060" - 0.066"	0.370" - 0.382"	0.032" - 0.062"
C98R062	1/10 W	0.095" - 0.105"	0.057" - 0.067"	0.005" - 0.020"
C125R406	1/2 W	0.123" - 0.129"	0.401" - 0.413"	0.090" - 0.125"
C125R500	1/2 W	0.123" - 0.129"	0.493" - 0.509"	0.048" - 0.078"
C125R500P	20 W	0.123" - 0.129"	0.493" - 0.509"	0.048" - 0.078"
C250R500P	25 W	0.247" - 0.255"	0.493" - 0.509"	0.110" - 0.140"
C250R750P	30 W	0.247" - 0.255"	0.740" - 0.760"	0.110" - 0.140"
C375R750P	60 W	0.370" - 0.380"	0.740" - 0.760"	0.110" - 0.140"
C125R500S	1/2 W	0.124" - 0.128"	0.490" - 0.512"	0.000" - 0.030"

Component General, Inc.

P/N:C40R115

Microwave Rods



Mechanical Specifications

Substrate Material:

Alumina Ceramic.

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is -200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

1/10 W.

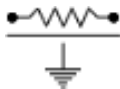
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

Part Dimensions



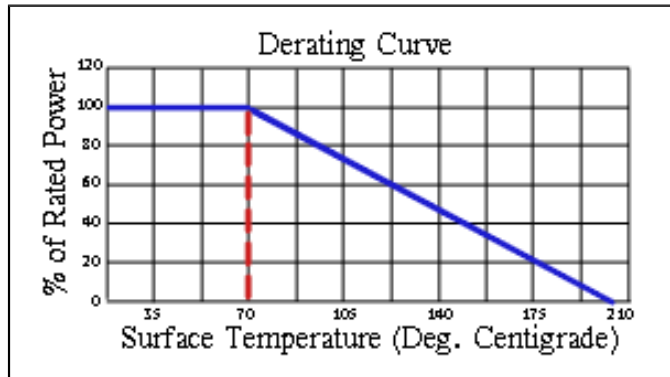
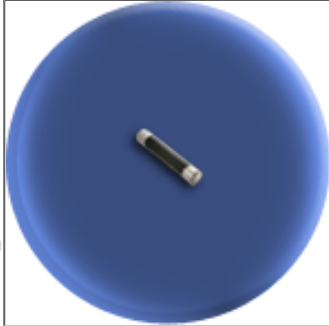
0.020" (0.508mm) - 0.040" (1.016mm) → | ← | ←
0.110" (2.794mm) - 0.120" (3.048mm) → | ← | ←

↓ ↑
.039" (0.991mm) - 0.044" (1.118mm)

Component General, Inc.

P/N:C60R120P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

10 W.

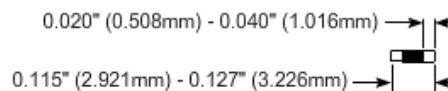
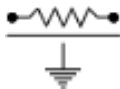
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

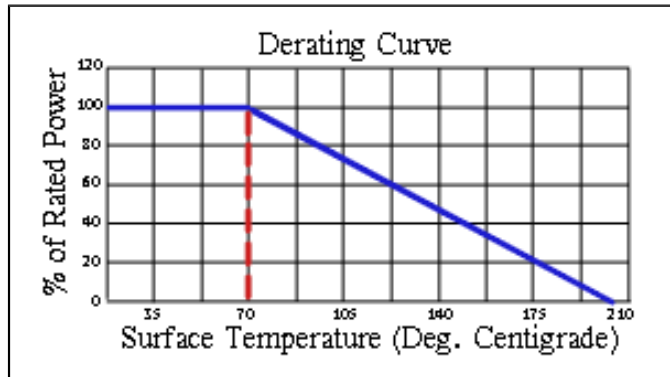
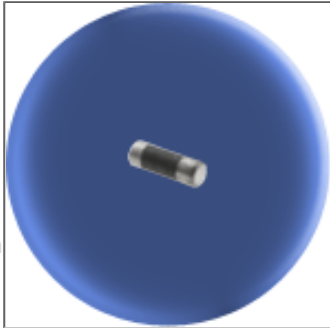
Part Dimensions



Component General, Inc.

P/N:C62R187

Microwave Rods



Mechanical Specifications

Substrate Material:

Alumina Ceramic.

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is -200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

10 W.

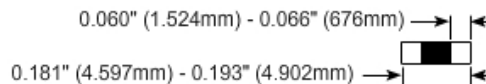
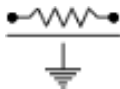
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

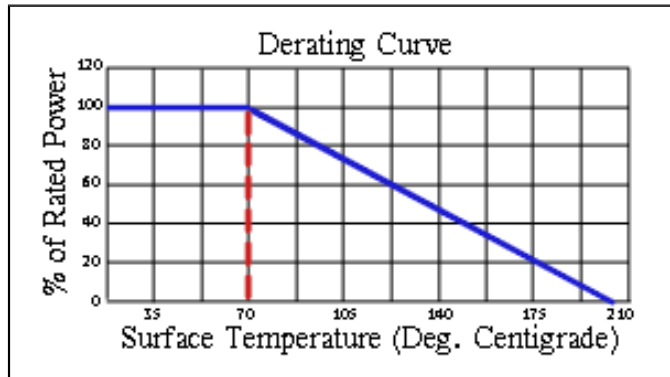
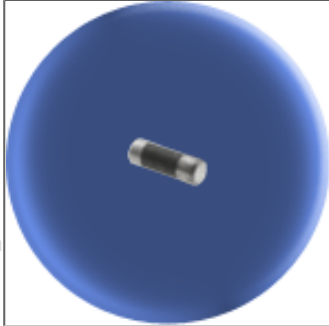
Part Dimensions



Component General, Inc.

P/N:C62R187P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

10 W.

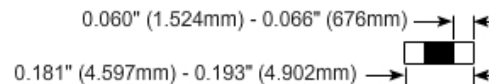
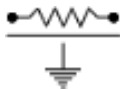
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

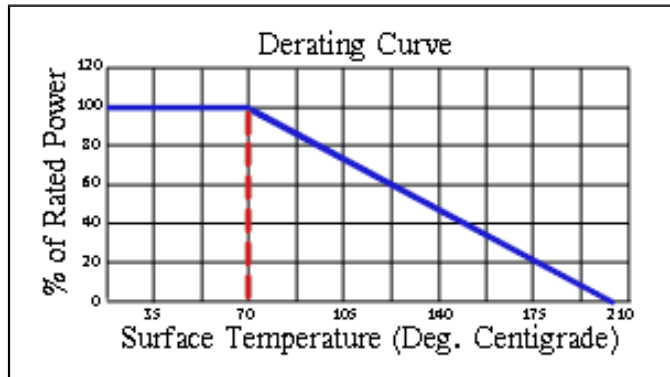
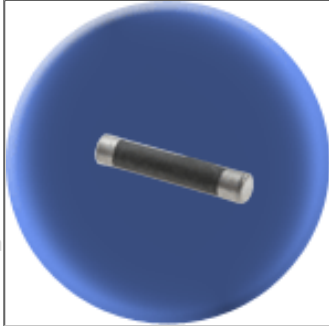
Part Dimensions



Component General, Inc.

P/N:C62R375P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

10 W.

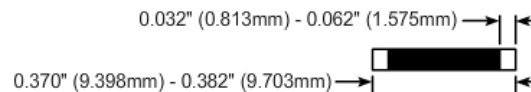
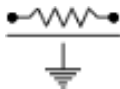
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

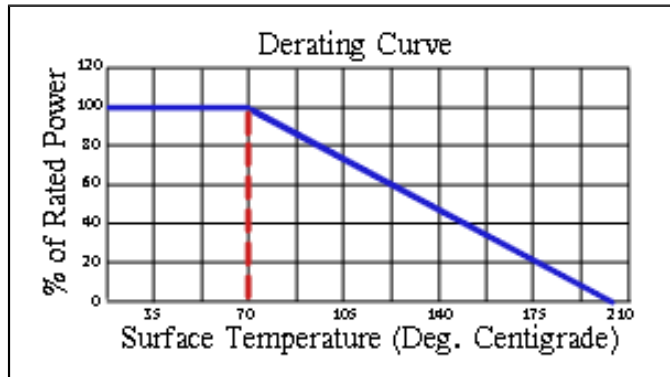
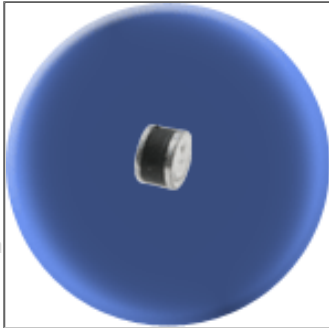
Part Dimensions



Component General, Inc.

P/N:C98R062

Microwave Rods



Mechanical Specifications

Substrate Material:

Alumina Ceramic.

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is -200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

1/10 W.

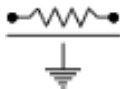
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

Part Dimensions



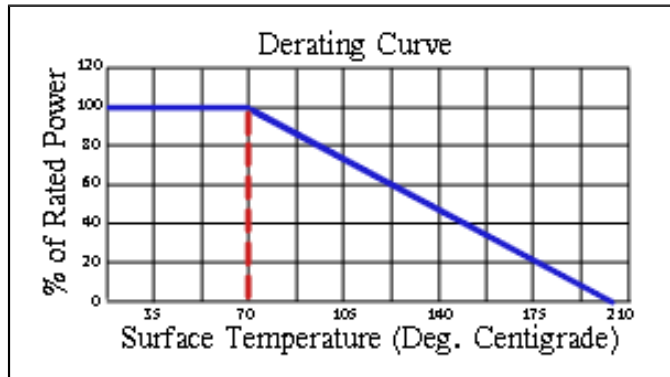
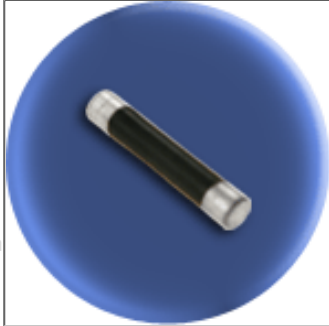
0.005" (0.127mm) - 0.020" (0.508mm)
0.057" (1.448mm) - 0.067" (1.702mm)

0.095" (2.413mm) - 0.105" (2.667mm)

Component General, Inc.

P/N:C125R406

Microwave Rods



Mechanical Specifications

Substrate Material:

Alumina Ceramic.

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is -200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

1/2 W.

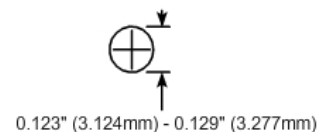
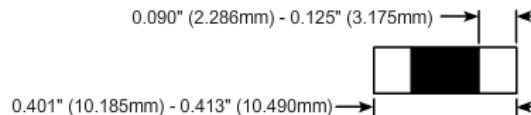
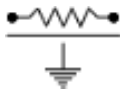
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

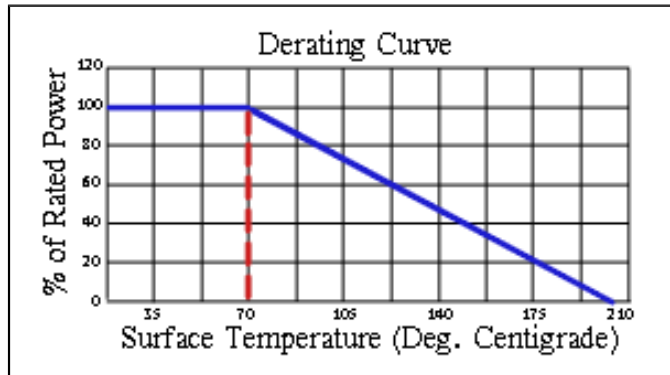
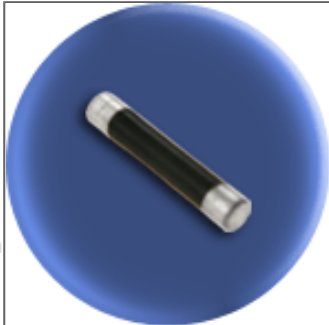
Part Dimensions



Component General, Inc.

P/N:C125R500

Microwave Rods



Mechanical Specifications

Substrate Material:

Alumina Ceramic.

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is -200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

20 W.

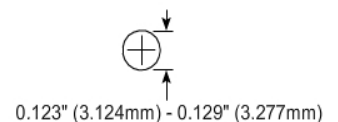
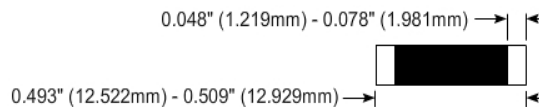
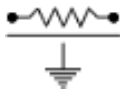
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

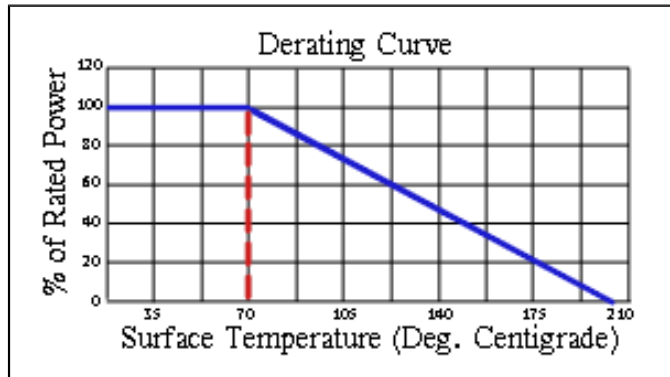
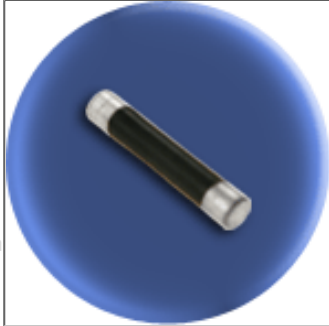
Part Dimensions



Component General, Inc.

P/N:C125R500P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

25 W.

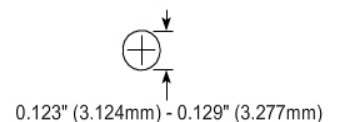
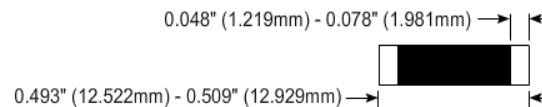
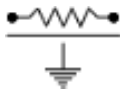
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

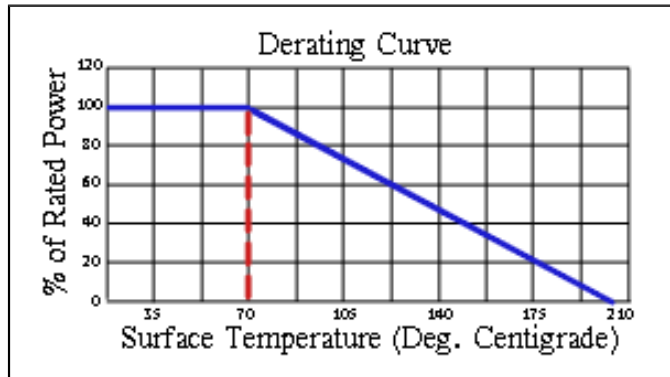
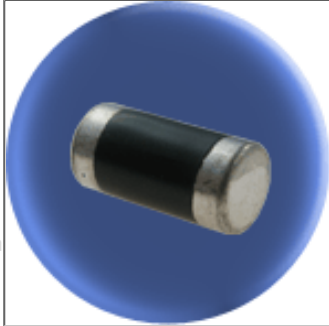
Part Dimensions



Component General, Inc.

P/N:C250R500P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

25 W.

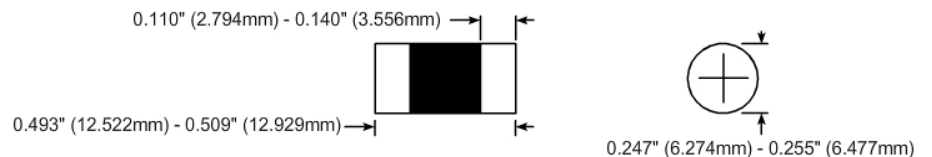
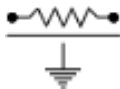
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

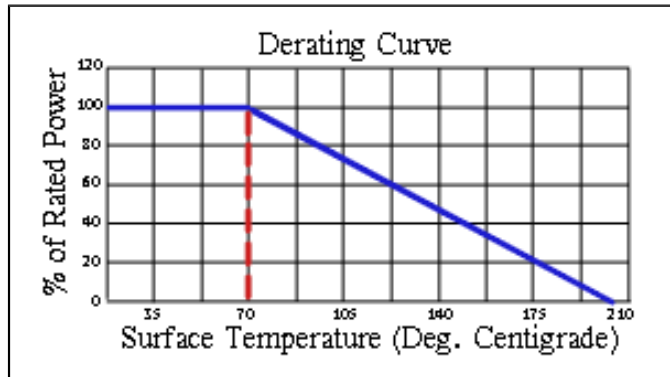
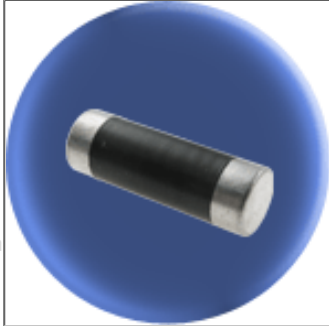
Part Dimensions



Component General, Inc.

P/N:C250R750P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

30 W.

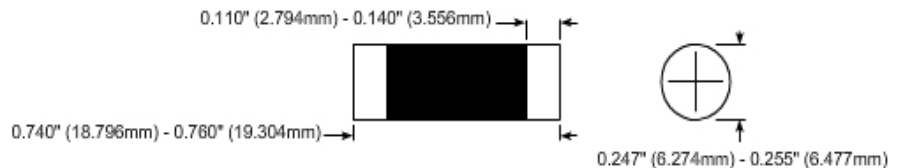
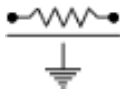
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

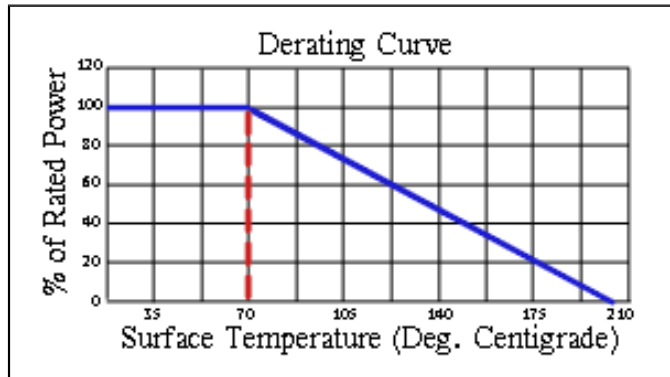
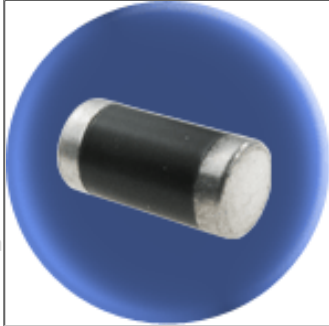
Part Dimensions



Component General, Inc.

P/N:C375R750P

Microwave Rods



Mechanical Specifications

Substrate Material:

Beryllium Oxide Ceramic.

(Note: Letter "P" denotes Beryllium Oxide.)

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

60 W.

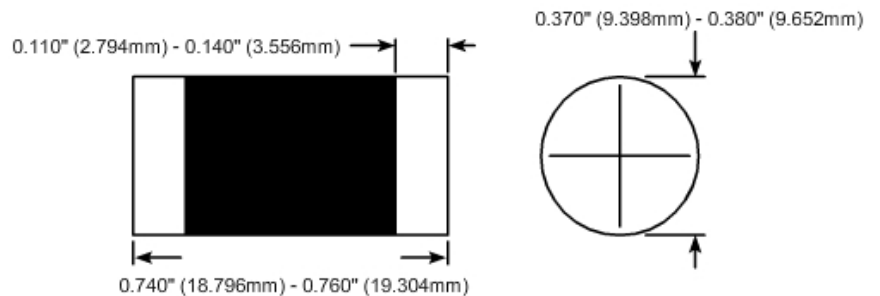
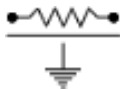
Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

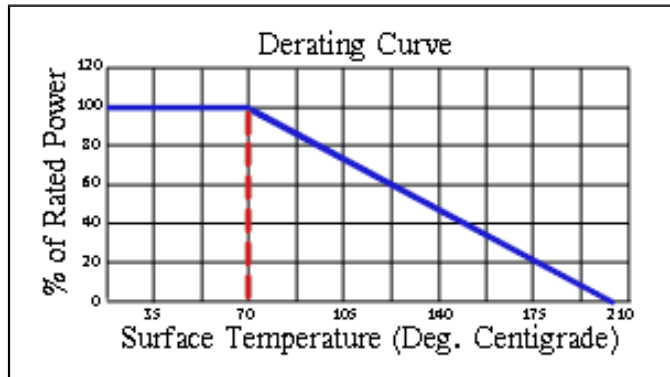
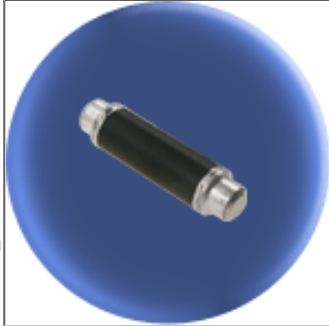
Part Dimensions



Component General, Inc.

P/N:C125R500S

Microwave Rods



Mechanical Specifications

Substrate Material:

Alumina Ceramic.

Terminals:

Terminal areas are nickel / tin plated which reduces oxidation thus providing a more solderable terminal.

Temperature Range :

-55°C to + 200°C.

Temperature Coefficient :

Standard Temperature Coefficient is - 200 to -300 PPM/°C.

Electrical Specifications

Resistance Value:

10 - 500 Ω As required. Other values available upon request.

Standard Resistance

Tolerance:

Standard Tolerance is $\pm 2\%$ at 25 °C. Other Tolerances are available upon request.

Nominal Power:

1/2 W.

Frequency Range :

D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

Load Life :

The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

Part Dimensions

