

Figure 1. Dimensions



Figure 2A.

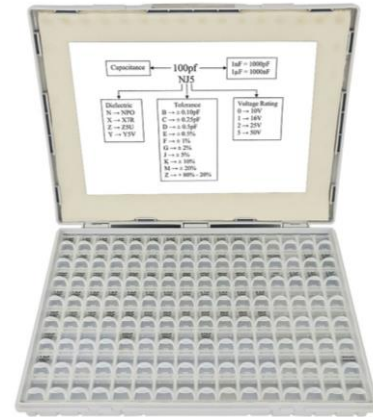


Figure 2B

### DESCRIPTION

Introducing our innovative 128-Bin Capacitor Kits, featuring our exclusive Super SMD Enclosure, specially designed with 128 individual lidded and labeled bins to accommodate a diverse range of SMD capacitors of different sizes, values, materials and voltages. In Figure 1 and Figure 2, you can see actual photographs of these kits, complete with detailed dimensions marked for your convenience.

For your easy reference and selection, please consult Table 2, which serves as a comprehensive guide for choosing from various versions of our capacitor kits. In addition, we've included hyperlinks to our online store where you can conveniently purchase these kits. It's important to note that two of these stores are our own, offering competitive prices, while the other two, Amazon and Digikey, reflect higher prices due to the commissions associated with their platforms.

Our capacitor kits are thoughtfully categorized by capacitor size, the number of values per kit, and the quantity of pieces per value. Explore our selection and find the perfect kit to meet your specific needs.

There are 2 generation of capacitor kits. The newest generation, created in 2023, offers more number of values per kit, and some of the capacitors have higher voltage ratings.

The 128-Bin Capacitor Kits have one of these options in capacitor size and number of values:

0402 size 89 values, 0.5pF to 22uF,  
 $\pm 0.25\text{pF}$  or  $\pm 5\%$  to  $\pm 20\%$ ;

0603 size 96 values, 0.5pF to 47uF,  
 $\pm 0.25\text{pF}$  or  $\pm 5\%$  to  $\pm 20\%$ ;

0805 size 91 values, 0.5pF to 100uF,  
 $\pm 0.25\text{pF}$  or  $\pm 5\%$  to  $\pm 20\%$ ;

1206 size 81 values, 1.5pF to 220uF,  
 $\pm 0.25\text{pF}$  or  $\pm 5\%$  to  $\pm 20\%$ .

When considering the quantity of pieces per value, you can select from four options: 50PCs, 100PCs, 200PCs, and 500PCs. Inside the enclosure, each capacitor is meticulously pre-sorted and individually stored, featuring vital information like capacitance, material, voltage, and tolerance prominently displayed on each lid, as illustrated in Figure 1.

Operating the enclosure is a breeze, ensuring efficient access to the desired capacitor within seconds. These kits offer exceptional versatility, easily finding a place on your workbench, shelf, or for transport to different locations. They prove to be the perfect choice for a wide range of tasks, including prototyping, experimentation with new circuits, or the reworking of printed circuit boards.

For more detailed information:

[www.analogtechnologies.com](http://www.analogtechnologies.com)

[www.smtzone.com](http://www.smtzone.com)

E-mail us: [sales@analogti.com](mailto:sales@analogti.com)

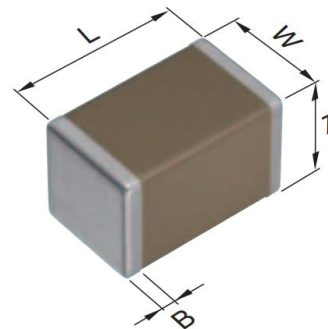


















Figure 3. Capacitor Dimensions


Table 1. For outlines, please refer to Figure 3.


Type	L (Body Length)	W (Body Width)	T (Body Height)	B (Terminal Width) Minimum	Unit
0402	0.039 ± 0.002	0.020 ± 0.002	0.020 ± 0.002	0.004	inch
	1.00 ± 0.05	0.50 ± 0.05	0.50 ± 0.05	0.10	mm
0603	0.063 ± 0.004	0.031 ± 0.004	0.031 ± 0.004	0.008	inch
	1.60 ± 0.10	0.80 ± 0.10	0.80 ± 0.10	0.20	mm
0805	0.079 ± 0.008	0.049 ± 0.008	0.049 ± 0.008	0.008	inch
	2.00 ± 0.20	1.25 ± 0.20	1.25 ± 0.20	0.20	mm
1206	0.126 ± 0.008	0.063 ± 0.008	0.063 ± 0.008	0.008	inch
	3.20 ± 0.20	1.60 ± 0.20	1.60 ± 0.20	0.20	mm


Table 2. Selection and Ordering Guide.


<b>Size</b>	<b>0402</b>	<b>0603</b>	<b>0805</b>	<b>1206</b>
<b>Values</b>	<b>89</b>	<b>96</b>	<b>91</b>	<b>81</b>
<b>Part #</b>	C04-50B	C06-50B	C08-50B	C12-50B
<b>50 PCs/Value</b>	50 PCs/Value	50 PCs/Value	50 PCs/Value	50 PCs/Value
<b>Online Stores</b>				
<b>Part #</b>	C04-100B	C06-100B	C08-100B	C12-100B
<b>100 PCs/Value</b>	100 PCs/Value	100 PCs/Value	100 PCs/Value	100 PCs/Value
<b>Online Stores</b>				
<b>Part #</b>	C04-200B	C06-200B	C08-200B	C12-200B
<b>200 PCs/Value</b>	200 PCs/Value	200 PCs/Value	200 PCs/Value	200 PCs/Value
<b>Online Stores</b>				
<b>Part #</b>	C04-500B	C06-500B	C08-500B	C12-500B
<b>500 PCs/Value</b>	500 PCs/Value	500 PCs/Value	500 PCs/Value	500 PCs/Value
<b>Online Stores</b>				

**Note:**

 **SZ**: [SMTZone.com](https://www.smtzone.com), our own online store, no commission fee.

 **AS**: [shop.analogtechnologies.com](https://shop.analogtechnologies.com), our own online store, no commission fee.

 **a**: Amazon, 15% higher priced due to commission fee.

 **K**: Digikey, 15% higher priced due to commission fee.



All the capacitors are manufactured by TDK.

Table 3. 0402 Size 89 Value Kits.

	1.0pF NPO ±0.25pF 50V	10pF NPO ±5% 50V	100pF NPO ±5% 50V	1.0nF X7R ±10% 50V	10nF X7R ±10% 50V	100nF X7R ±10% 16V	1.0uF X5R ±10% 10V	10uF X5R ±20% 10V
	1.2pF NPO ±0.25pF 50V	12pF NPO ±5% 50V	120pF NPO ±5% 50V	1.2nF X7R ±10% 50V	12nF X7R ±10% 25V			
	1.5pF NPO ±0.25pF 50V	15pF NPO ±5% 50V	150pF NPO ±5% 50V	1.5nF X7R ±10% 50V	15nF X7R ±10% 25V			
	1.8pF NPO ±0.25pF 50V	18pF NPO ±5% 50V	180pF NPO ±5% 50V	1.8nF X7R ±10% 50V	18nF X7R ±10% 25V			
	2.0pF NPO ±0.25pF 50V							
	2.2pF NPO ±0.25pF 50V	22pF NPO ±5% 50V	220pF X7R ±10% 50V	2.2nF X7R ±10% 50V	22nF X7R ±10% 25V	220nF X5R ±10% 10V	2.2uF X5R ±10% 10V	22uF X5R ±20% 10V
	2.4pF NPO ±0.25pF 50V							
	2.5pF NPO ±0.25pF 50V							
	2.7pF NPO ±0.25pF 50V	27pF NPO ±5% 50V	270pF X7R ±10% 50V	2.7nF X7R ±10% 50V	27nF X7R ±10% 25V			
	3.0pF NPO ±0.25pF 50V							
	3.3pF NPO ±0.25pF 50V	33pF NPO ±5% 50V	330pF X7R ±10% 50V	3.3nF X7R ±10% 50V	33nF X7R ±10% 25V	330nF X5R ±10% 10V	3.3uF X5R ±10% 10V	
	3.6pF NPO ±0.25pF 50V							
	3.9pF NPO ±0.25pF 50V	39pF NPO ±5% 50V	390pF X7R ±10% 50V	3.9nF X7R ±10% 50V	39nF X7R ±10% 25V			
	4.0pF NPO ±0.25pF 50V							
	4.3pF NPO ±0.25pF 50V							
	4.7pF NPO ±0.25pF 50V	47pF NPO ±5% 50V	470pF X7R ±10% 50V	4.7nF X7R ±10% 50V	47nF X7R ±10% 25V	470nF X5R ±10% 10V	4.7uF X5R ±10% 10V	
0.5pF NPO ±0.25pF 50V	5.0pF NPO ±0.25pF 50V							
	5.6pF NPO ±0.25pF 50V	56pF NPO ±5% 50V	560pF X7R ±10% 50V	5.6nF X7R ±10% 50V	56nF X7R ±10% 25V			
0.6pF NPO ±0.25pF 50V	6.0pF NPO ±0.25pF 50V							
	6.8pF NPO ±0.25pF 50V	68pF NPO ±5% 50V	680pF X7R ±10% 50V	6.8nF X7R ±10% 50V	68nF X7R ±10% 25V			
0.7pF NPO ±0.25pF 50V	7.0pF NPO ±0.25pF 50V							
	7.5pF NPO ±0.25pF 50V							
0.8pF NPO ±0.25pF 50V	8.0pF NPO ±0.25pF 50V							
	8.2pF NPO ±0.25pF 50V	82pF NPO ±5% 50V	820pF X7R ±10% 50V	8.2nF X7R ±10% 50V	82nF X7R ±10% 25V			
0.9pF NPO ±0.25pF 50V	9.0pF NPO ±0.25pF 50V							
	9.1pF NPO ±0.25pF 50V							



Table 4. 0603 Size 96 Value Kits.

	1.0pF NPO ±0.25pF 50V	10pF NPO ±0.5pF 50V	100pF NPO ±5% 50V	1.0nF X7R ±10% 50V	10nF X7R ±10% 50V	100nF X7R ±10% 25V	1.0uF X5R ±10% 10V	10uF X5R ±10% 10V		
	1.2pF NPO ±0.25pF 50V	12pF NPO ±5% 50V	120pF NPO ±5% 50V	1.2nF X7R ±10% 50V	12nF X7R ±10% 50V	120nF X7R ±10% 25V				
	1.5pF NPO ±0.25pF 50V	15pF NPO ±5% 50V	150pF NPO ±5% 50V	1.5nF X7R ±10% 50V	15nF X7R ±10% 50V	150nF X5R ±10% 16V				
	1.8pF NPO ±0.25pF 50V	18pF NPO ±5% 50V	180pF NPO ±5% 50V	1.8nF X7R ±10% 50V	18nF X7R ±10% 25V	180nF X5R ±10% 16V				
	2.2pF NPO ±0.25pF 50V	22pF NPO ±5% 50V	220pF NPO ±5% 50V	2.2nF X7R ±10% 50V	22nF X7R ±10% 25V	220nF X5R ±10% 16V	2.2uF X5R ±10% 10V	22uF X5R ±20% 10V		
	2.4pF NPO ±0.25pF 50V									
	2.5pF NPO ±0.25pF 50V									
	2.7pF NPO ±0.25pF 50V	27pF NPO ±5% 50V	270pF NPO ±5% 50V	2.7nF X7R ±10% 50V	27nF X7R ±10% 25V	270nF X5R ±10% 16V				
	3.0pF NPO ±0.25pF 50V		300pF NPO ±5% 50V							
	3.3pF NPO ±0.25pF 50V	33pF NPO ±5% 50V	330pF NPO ±5% 50V	3.3nF X7R ±10% 50V	33nF X7R ±10% 25V	330nF X5R ±10% 16V	3.3uF X5R ±10% 10V			
	3.6pF NPO ±0.25pF 50V									
	3.9pF NPO ±0.25pF 50V	39pF NPO ±5% 50V	390pF NPO ±5% 50V	3.9nF X7R ±10% 50V	39nF X7R ±10% 25V	390nF X5R ±10% 16V				
	4.0pF NPO ±0.25pF 50V									
	4.3pF NPO ±0.25pF 50V	43pF NPO ±5% 50V	430pF NPO ±5% 50V							
	4.7pF NPO ±0.25pF 50V	47pF NPO ±5% 50V	470pF NPO ±5% 50V	4.7nF X7R ±10% 50V	47nF X7R ±10% 25V	470nF X5R ±10% 16V	4.7uF X5R ±10% 10V	47uF X5R ±20% 10V		
0.5pF NPO ±0.25pF 50V	5.0pF NPO ±0.25pF 50V									
	5.6pF NPO ±0.25pF 50V	56pF NPO ±5% 50V	560pF NPO ±5% 50V	5.6nF X7R ±10% 50V	56nF X7R ±10% 25V					
0.6pF NPO ±0.25pF 50V										
	6.2pF NPO ±0.25pF 50V									
	6.8pF NPO ±0.25pF 50V	68pF NPO ±5% 50V	680pF NPO ±5% 50V	6.8nF X7R ±10% 50V	68nF X7R ±10% 25V	680nF X5R ±10% 16V				
0.7pF NPO ±0.25pF 50V										
0.8pF NPO ±0.25pF 50V										
	8.2pF NPO ±0.25pF 50V	82pF NPO ±5% 50V	820pF NPO ±5% 50V	8.2nF X7R ±10% 50V	82nF X7R ±10% 25V	820nF X5R ±10% 16V				
0.9pF NPO ±0.25pF 50V	9.0pF NPO ±0.25pF 50V									
		91pF NPO ±5% 50V								



Table 5. 0805 Size 91 Value Kits.

	1.0pF NPO ±0.25pF 50V	10pF NPO ±0.5pF 50V	100pF NPO ±5% 50V	1.0nF NPO ±5% 50V	10nF X7R ±10% 50V	100nF X7R ±10% 50V	1.0uF X7R ±10% 25V	10uF X5R ±10% 10V	100uF X5R ±20% 10V
	1.2pF NPO ±0.25pF 50V	12pF NPO ±5% 50V	120pF NPO ±5% 50V	1.2nF NPO ±5% 50V	12nF X7R ±10% 50V	120nF X7R ±10% 50V			
	1.5pF NPO ±0.25pF 50V	15pF NPO ±5% 50V	150pF NPO ±5% 50V	1.5nF NPO ±5% 50V	15nF X7R ±10% 50V	150nF X7R ±10% 50V			
	1.8pF NPO ±0.25pF 50V	18pF NPO ±5% 50V	180pF NPO ±5% 50V	1.8nF NPO ±5% 50V	18nF X7R ±10% 50V	180nF X7R ±10% 50V			
	2.2pF NPO ±0.25pF 50V	22pF NPO ±5% 50V	220pF NPO ±5% 50V	2.2nF NPO ±5% 50V	22nF X7R ±10% 50V	220nF X7R ±10% 50V	2.2uF X5R ±10% 25V	22uF X5R ±20% 10V	
	2.4pF NPO ±0.25pF 50V								
	2.7pF NPO ±0.25pF 50V	27pF NPO ±5% 50V	270pF NPO ±5% 50V	2.7nF NPO ±5% 50V	27nF X7R ±10% 50V	270nF X7R ±10% 50V			
	3.0pF NPO ±0.25pF 50V								
	3.3pF NPO ±0.25pF 50V	33pF NPO ±5% 50V	330pF NPO ±5% 50V	3.3nF NPO ±5% 50V	33nF X7R ±10% 50V	330nF X7R ±10% 50V	3.3uF X5R ±10% 10V		
	3.6pF NPO ±0.25pF 50V								
	3.9pF NPO ±0.25pF 50V	39pF NPO ±5% 50V	390pF NPO ±5% 50V	3.9nF NPO ±5% 50V	39nF X7R ±10% 50V	390nF X7R ±10% 50V			
	4.3pF NPO ±0.25pF 50V		430pF NPO ±5% 50V						
	4.7pF NPO ±0.25pF 50V	47pF NPO ±5% 50V	470pF NPO ±5% 50V	4.7nF X7R ±10% 50V	47nF X7R ±10% 50V	470nF X7R ±10% 50V	4.7uF X5R ±10% 10V	47uF X5R ±20% 10V	
0.5pF NPO ±0.25pF 50V									
	5.6pF NPO ±0.25pF 50V	56pF NPO ±5% 50V	560pF NPO ±5% 50V	5.6nF X7R ±10% 50V	56nF X7R ±10% 50V	560nF X7R ±10% 50V			
0.6pF NPO ±0.25pF 50V									
	6.8pF NPO ±0.25pF 50V	68pF NPO ±5% 50V	680pF NPO ±5% 50V	6.8nF X7R ±10% 50V	68nF X7R ±10% 50V	680nF X7R ±10% 50V			
0.7pF NPO ±0.25pF 50V									
0.8pF NPO ±0.25pF 50V									
	8.2pF NPO ±0.25pF 50V	82pF NPO ±5% 50V	820pF NPO ±5% 50V	8.2nF X7R ±10% 50V	82nF X7R ±10% 50V	820nF X7R ±10% 25V			
0.9pF NPO ±0.25pF 50V	9.0pF NPO ±0.25pF 50V								



Table 6. 1206 Size 81 Value Kits.

	10pF NPO ±0.5pF 50V	100pF NPO ±5% 50V	1.0nF NPO ±5% 50V	10nF X7R ±10% 50V	100nF X7R ±10% 50V	1.0uF X7R ±10% 25V	10uF X5R ±10% 10V	100uF X5R ±20% 10V
	12pF NPO ±5% 50V	120pF NPO ±5% 50V	1.2nF NPO ±5% 50V	12nF X7R ±10% 50V	120nF X7R ±10% 50V			
1.5pF NPO ±0.25pF 50V	15pF NPO ±5% 50V	150pF NPO ±5% 50V	1.5nF NPO ±5% 50V	15nF X7R ±10% 50V	150nF X7R ±10% 50V			150uF X5R ±20% 6.3V
1.8pF NPO ±0.25pF 50V	18pF NPO ±5% 50V	180pF NPO ±5% 50V	1.8nF NPO ±5% 50V	18nF X7R ±10% 50V	180nF X7R ±10% 50V			
2.2pF NPO ±0.25pF 50V	22pF NPO ±5% 50V	220pF NPO ±5% 50V	2.2nF NPO ±5% 50V	22nF X7R ±10% 50V	220nF X7R ±10% 50V	2.2uF X5R ±10% 25V	22uF X5R ±10% 10V	220uF X5R ±20% 6.3V
2.7pF NPO ±0.25pF 50V	27pF NPO ±5% 50V	270pF NPO ±5% 50V	2.7nF NPO ±5% 50V	27nF X7R ±10% 50V	270nF X7R ±10% 50V			
3.3pF NPO ±0.25pF 50V	33pF NPO ±5% 50V	330pF NPO ±5% 50V	3.3nF NPO ±5% 50V	33nF X7R ±10% 50V	330nF X7R ±10% 50V	3.3uF X5R ±10% 25V		
3.9pF NPO ±0.25pF 50V	39pF NPO ±5% 50V	390pF NPO ±5% 50V	3.9nF X7R ±10% 50V	39nF X7R ±10% 50V	390nF X7R ±10% 50V			
4.7pF NPO ±0.25pF 50V	47pF NPO ±5% 50V	470pF NPO ±5% 50V	4.7nF X7R ±10% 50V	47nF X7R ±10% 50V	470nF X7R ±10% 50V	4.7uF X5R ±10% 25V	47uF X5R ±10% 10V	
5.6pF NPO ±0.5pF 50V	56pF NPO ±5% 50V	560pF NPO ±5% 50V	5.6nF X7R ±10% 50V	56nF X7R ±10% 50V	560nF X7R ±10% 50V			
6.8pF NPO ±0.5pF 50V	68pF NPO ±5% 50V	680pF NPO ±5% 50V	6.8nF X7R ±10% 50V	68nF X7R ±10% 50V	680nF X7R ±10% 50V		68uF X5R ±20% 10V	
8.2pF NPO ±0.5pF 50V	82pF NPO ±5% 50V	820pF NPO ±5% 50V	8.2nF X7R ±10% 50V	82nF X7R ±10% 50V	820nF X7R ±10% 50V			



Table 7. Manufacturer Part Numbers for the Capacitors Found in 0402 Size & 0603 Size Kits

Table with 8 columns: Capacitor, Manufacturer Part Number, Capacitor, Manufacturer Part Number, Capacitor, Manufacturer Part Number, Capacitor, Manufacturer Part Number. It lists capacitor values and their corresponding manufacturer part numbers for 0402 and 0603 size kits.





Table 8. Manufacturer Part Numbers for the Capacitors Found in 0805 Size & 1206 Size Kits

Table with 8 columns: Capacitor, Manufacturer Part Number, Capacitor, Manufacturer Part Number, Capacitor, Manufacturer Part Number, Capacitor, Manufacturer Part Number. It lists capacitor values and their corresponding manufacturer part numbers for 0805 and 1206 size kits.

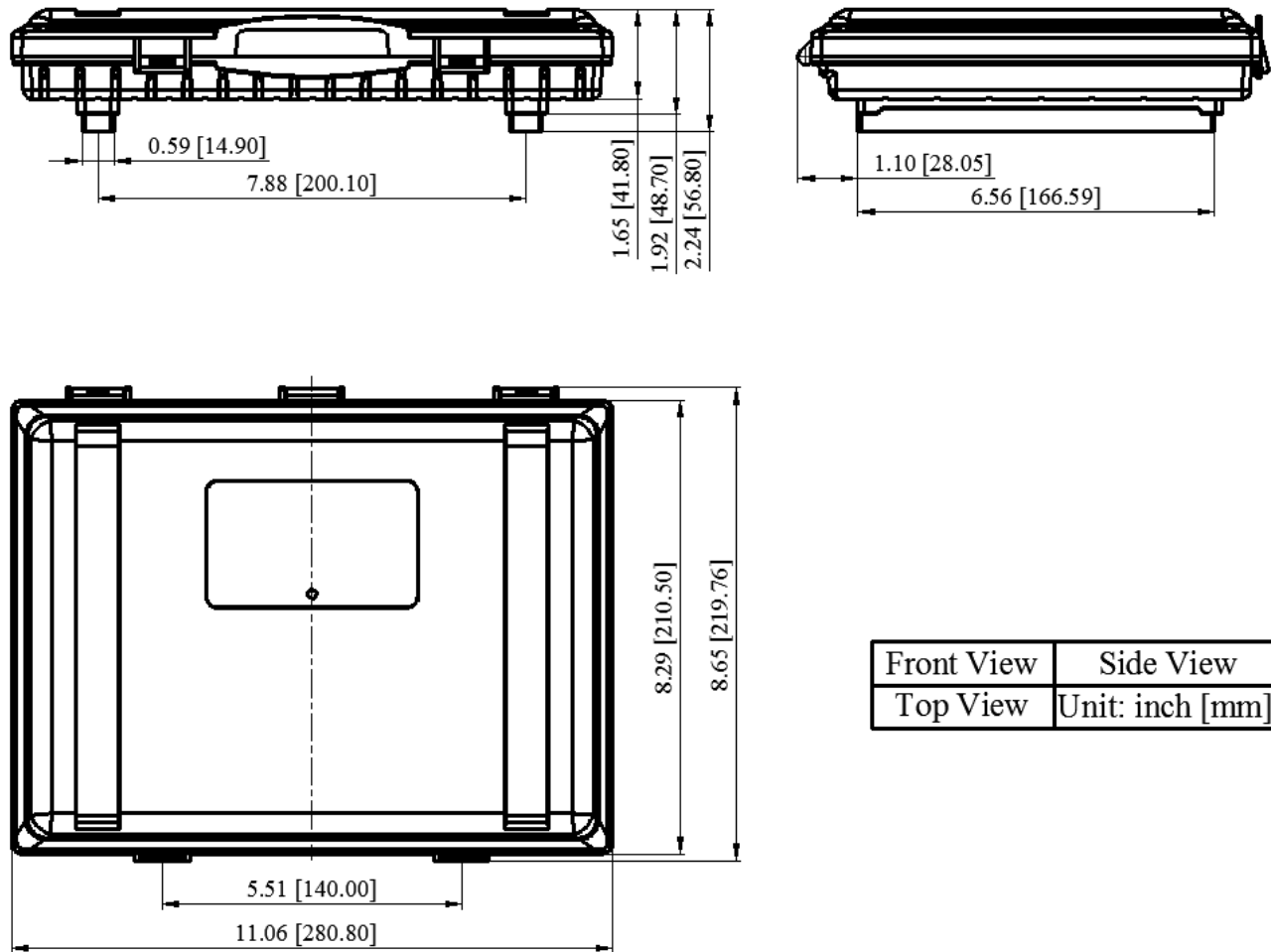
**DIMENSIONS**


Figure 4. Outlines Dimensions

**NOTICE**

1. It is important to carefully read and follow the warnings, cautions, and product-specific notes provided with electronic components. These instructions are designed to ensure the safe and proper use of the component and to prevent damage to the component or surrounding equipment. Failure to follow these instructions could result in malfunction or failure of the component, damage to surrounding equipment, or even injury or harm to individuals. Always take the necessary precautions and seek professional assistance if unsure about proper use or handling of electronic components.
2. Please note that the products and specifications described in this publication are subject to change without prior notice as we continuously improve our products. Therefore, we recommend checking the product descriptions and specifications before placing an order to ensure that they are still applicable. We also reserve the right to discontinue the production and delivery of certain products, which means that not all products named in this publication may always be available.
3. This means that while ATI may provide information about the typical requirements and applications of their products, they cannot guarantee that their products will be suitable for all customer applications. It is the responsibility of the customer to evaluate whether an ATI product with the specified properties is appropriate for their particular application.



4. ATI warrants its products to perform according to specifications for one year from the date of sale, except when damaged due to excessive abuse. If a product fails to meet specifications within one year of the sale, it can be exchanged free of charge.
5. ATI reserves the right to make changes or discontinue products or services without notice. Customers are advised to obtain the latest information before placing orders.
6. All products are sold subject to terms and conditions of sale, including those pertaining to warranty, patent infringement, and limitation of liability. Customers are responsible for their applications using ATI products, and ATI assumes no liability for applications assistance or customer product design.
7. ATI does not grant any license, either express or implied, under any patent right, copyright, mask work right, or other intellectual property right of ATI.
8. ATI's publication of information regarding third-party products or services does not constitute approval, warranty, or endorsement.
9. ATI retains ownership of all rights for special technologies, techniques, and designs for its products and projects, as well as any modifications, improvements, and inventions made by ATI.
10. Please note that despite operating the passive electronic components as specified, malfunctions or failures before the end of their usual service life may still occur in individual cases due to the current state of the art. Therefore, in customer applications that require a high level of operational safety, especially those in which the malfunction or failure of a passive electronic component could pose a threat to human life or health (such as in accident prevention or life-saving systems), it is essential to ensure through suitable design of the customer application or other measures taken by the customer (such as the installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of a passive electronic component malfunction or failure.