

What Size Banana Plug are you using?

Banana plug sizes and types

Banana Plugs (male) and Banana Jacks (female) have been used in the testing applications for almost 100 years. They come in three common diameters 4mm, 3mm, and 2mm. Manufactures have different tolerances, but the table below shows typical dimensions for the three sizes. Plugs are measured at the largest OD of the banana section. Jacks are measured at the ID of the connection

	Actual Size (OD of Plug at largest point, ID of Jack)		
	4mm	3mm	2mm
Banana Plugs	.18" (4.6mm)	.12" (3mm)	.10" (2.5mm)
Banana Jacks	.16" (4.0mm)	.11" (2.7mm)	.08" (2mm)

The **4mm version** accounts for more than 94% of the total usage. In fact, when someone uses the term "banana plug" or "banana jack", they are almost certainly referring to the 4mm version. The 3mm and 2mm variations are both called "**mini-bananas**", but they cannot be used interchangeably.

Banana plugs and jacks also come in different safety variations. The first banana plugs were un-shrouded, (1) in the photo below. These are the easiest to manufacture and are still very popular in many low voltage applications. Fully shrouded banana plugs, (3) in the photo below, were introduced for protection at high voltages, but they require a banana jack that will accept them. A cross between shrouded and un-shrouded is the retractable shroud banana plug, (2) in the photo below. These, as the name implies, have a spring loaded shroud that gets pushed/retracted into the housing when the plug is inserted into a jack. Although retractable banana plugs offer a practical safety level, they do not meet the requirements of approval agencies for high voltage applications.



(1)

(2)

(3)