

Selecting the best connector for your power sensor

Customers may select one of several connector types for most LadyBug sensors. This often allows the sensor to be placed directly on the customer’s DUT, increasing measurement accuracy by eliminating adaptors. Connectors are installed and the VSWR is verified at the beginning of the sensor’s manufacturing process. Field replacement is not recommended and voids the warranty because it could degrade the VSWR and calibration.

Connector compatibility

We have carefully chosen small form connector types to provide the best service for customers. Our standard and optional small form connectors are 3.5mm, SMA and 2.92mm. All three types are rated for mating with each other and match performance is similar to the lesser connector, and in some cases exceeds it.

Our SMA connectors are high performance *Super SMA* connectors. These connectors have a long lifetime with a connects/disconnects rating similar to that of 3.5 mm connectors. Our connectors are rated for thousands of connects & disconnects.

Read more about connector quality and compatibility here:

[SMA / 3.5 mm / 2.92 mm Connector Intermateability](#)

Available connectors

Generally, in the RF & microwave test instrument industry, a source will be fitted with a female connector and a sensor will be fitted with a male connector. Our available connectors are detailed in Table 1. These connectors are our recommendations for general use.

Sensor Maximum Frequency	Available Connector * Standard/Recommended Connector	Ordering Code	Notes
18.6 GHz	Type-N male*	ONM	
26.5 GHz	3.5 mm male*	35M	Compatible with SMA
40 GHz	2.92 mm male*	29M	Compatible with 3.5 mm & SMA
54 GHz	2.4 mm male*	24M	
67 GHz	1.85 mm male*	18M	
110 GHz	1.0 mm male*	10M	
18.6 GHz	Type-N female	ONF	
26.5 GHz	SMA male	OSM	
26.5 GHz	SMA female	OSF	
40 GHz	2.92 mm female	29F	
50 GHz	2.4 mm female	24F	
67 GHz	1.85 mm male	18M	

Table 1 Standard Recommended & Available Connectors

Power sensors users may need a different connector for various reasons, for example, a user who intends to attach a cable to the sensor might prefer a female connector.

Standard and Optional Connectors

Available connectors by sensor model

The table below indicates the standard connector for each sensor and the available optional connector. Refer to Table 1 for ordering codes.

Sensor	Standard Connector	Order Code	Optional Available Connectors
LB5908A, LB5908L, LB5912A, LB5918A, LB5918L	Type-N male	ONM	Type-N female, SMA male & female, 3.5mm male
LB5926A, LB5926L	3.5mm male	35M	SMA male & female
LB5940A, LB5940L	2.92 mm male	29M	2.92 mm female (29F)
LB5944A, LB5944L & Option 050	2.4 mm male	24M	2.4 mm female (24F)
LB5954A, LB5954L	2.4 mm male	24M	2.4 mm female (24F)
LB5967L	1.85 mm male	18M	N/A
LB559A, LB579A	No Standard	ONM,ONF, OSM,OSF, 35M	Type-N male & female, SMA male & female, 3.5mm male
LB589A	No Standard	OSM,OSF, 35M	3.5mm male, SMA male & female
LB478A, LB479A, LB480A	No Standard	ONM,ONF, OSM,OSF, 35M	Type-N male & female, SMA male & female, 3.5mm male
LB680A*	No Standard	ONM,ONF, OSM,OSF, 35M	Type-N male & female, SMA male & female, 3.5mm male

*If ordered with Type-N, frequency is limited to 18.6 GHz, others 20 GHz.

Available connectors by frequency range

The table below lists the available optional connectors by frequency range.

Sensor Maximum Frequency	Available Optional Connector	Notes
18.6 GHz	3.5 mm male, SMA male, SMA female, Type-N female	
26.5 GHz	3.5 mm male, SMA male, SMA female	
40 GHz	2.92 mm male and 2.92 mm female	
44 GHz	2.4 mm male and 2.4 mm female	
54 GHz	2.4 mm male and 2.4 mm female	
67 GHz	1.85 mm male	
110 GHz	1.0 mm male	