

## High Power SMA Connectors



### DESCRIPTION

RoMack's high power SMA connectors are patterned after SMA 905 connectors. The difference is that the barrel is available in two different lengths (see the dimensional drawing included on this sheet) and the end face has been cored out. This allows the fiber to sit in the connector barrel surrounded only by air. This type of termination is key for high power applications so that if there is any misalignment or "beam walk", the beam will not melt the epoxy or ablate the metal which are two of the main failure mechanisms of high power ends.

This type of end fitting has been used successfully for

more than a decade around the world and RoMack can provide connectors for fibers from 200um core up to 1500um core. Naturally, RoMack can provide turn key assemblies as well, but for those who wish to do their own high power cable terminations or perform field repairs of laser cables, these connectors are ideal.

The standard connector is supplied fabricated from aluminum but may be fabricated from various materials so please don't hesitate to inquire.

Termination instructions and supplies, including high temperature epoxies, can be supplied as well.

### APPLICATIONS

- Coupling high power lasers into fiber optics

### FEATURES

- Deep well design.
- No epoxy within 10mm of fiber end face.
- Sharply reduces ablation and decomposition due to misalignment or over spray.
- Finished cable assemblies or sold separately.
- Aluminum, Stainless, or Plastic bodies.
- Aluminum, Stainless, Plastic, or glass inserts.

# High Power SMA Connectors

## ORDERING/SPECIFYING INFORMATION

The RoMack high power connector is ordered by specifying the fiber diameter, the barrel length and barrel material.

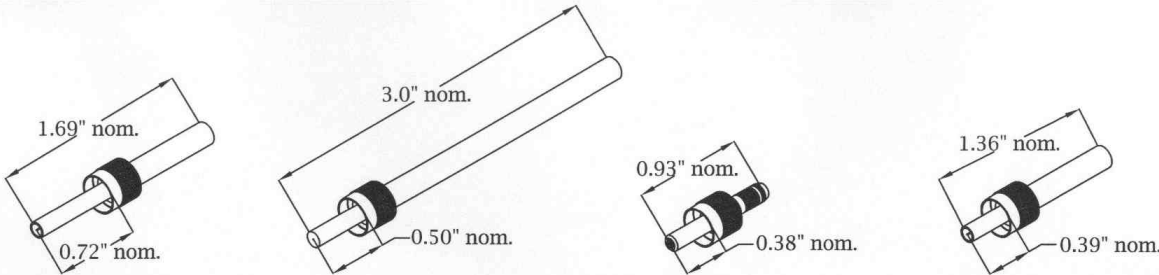
When specifying the fiber diameter it is crucial that the diameter that will actually be presented to the laser beam is used. That is, if the intention is to use a 600µm core, 660µm

clad, 710µm OD fiber and this fiber will be stripped of its buffer so that the laser will only see the core and cladding—then specify the diameter 660µm.

The actual hole diameter will be tolerated at the specified diameter +12µm.

## NOTES

- If these tolerances are not suitable for your application please call RoMack as other tolerances can be held if needed.
- If you desire the connector be made from a material other than aluminum please contact RoMack.

		
<b>Barrel Material</b> 1) Aluminum 2) Stainless Steel 3) Copper 4) Glass 5) Other _____	<b>Barrel Length</b> 1) Std. SMA - 0.387" 2) Elongated SMA - 0.717" 3) Other _____	<b>Requested Hole Size</b> _____
<p><i>RoMack offers a wide variety of assembly options. Please contact one of our technical sales associates to assist you in defining the configuration that really works in your application.</i></p>		

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