

Make the QuarterBack® Your First Round Pick

In high frequency applications, consistent mating is required to ensure reliable performance. Generally, this means the use of threaded connectors which require torque wrenches causing problems in high density or hard to reach areas. Standard blind-mate connectors address this issue, but require demating tools that do not ensure a positive mate. The QuarterBack® family of connectors encompasses the best of blind-mate and threaded connector features. With minimal insertion forces due to incorporating the ease of a quarter turn bayonet style coupling nut, the QuarterBack® is the solution for your application.

Common coax connector to PCB transitions use a full detent male SMP/GPO or SMPM/GPPO on the board side with a female equivalent on the mating cable guaranteeing a secure connection. Due to its better captivation, a full detent mated pair is preferred over smooth bore; on the other hand, it can be difficult to mate and demate due to the high forces, up to 15 lbs insertion and 5 lbs withdrawal. These forces can be transferred to the board, affecting the solder joints or cable and causing possible breakage. Therefore, to properly demate a full detent pair without damage, tools are required. However, the QuarterBack® eliminates these issues while maintaining a solid mate with its spring loaded positive force captivation.

The QuarterBack® system uses a smooth bore male connector, with insertion/withdrawal forces of 2 lbs/0.5 lbs, which greatly reduce the possibilities of FOD and damage to the system. Additionally, the smooth bore interface will prolong the mating cycle life of the connectors, ensuring consistent performance over the life of the system. With high performance, reliability and testing equal to the full detent equivalents, the QuarterBack® is ideal for use in high impact military, aerospace and custom commercial test environments.

Incorporating high performance and ease of use in a connector that will please both mechanical and electrical engineers do not have to be mutually exclusive. Undeniably, the QuarterBack® can ensure that your high fidelity system will maintain its performance and structural integrity throughout multiple mating and demating cycles. Available in panel mount, jam nut and snap in variations, the QuarterBack® has your back for any project. Ideally made for high density, high vibration applications, so make the SV Microwave's QuarterBack® your first round pick.



High Frequency Connectivity...



FEATURES

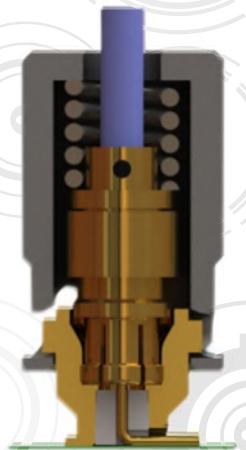
- Quarter turn bayonet locking feature on standard SMP/SMPM interface
- Low VSWR through 40 GHz(SMP)/65 GHz(SMPM)
- Female cable connector options available for all flexible cable types .086" diameter and smaller
- All standard SMP/SMPM male connector options available upon request

APPLICATIONS

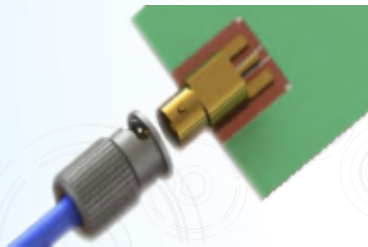
- Bench-top testing (PCB mount, cable connectors and adapters)
- High vibration environments
- Applications requiring a high number of mating cycles
- Military and Commercial options available

BENEFITS

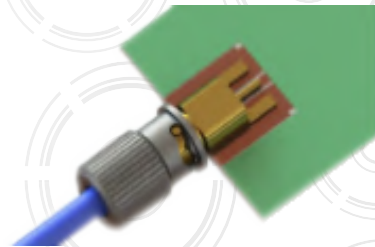
- Low insertion/extraction forces, compared to standard full detent SMP and SMPM, mean less torque on board mount connector solder joints during mating and demating
- Spring loaded positive mating feature allows excellent electrical performance even in extreme vibration environments
- Low mating forces allow for more mating cycles without failure compared to full detent SMP and SMPM



**Mated Cable Connector
and Surface Mount Male**



**Cabled Female and
Male Edge Launch Unmated**



**Cabled Female and
Male Edge Launch Mated**

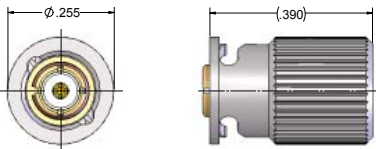
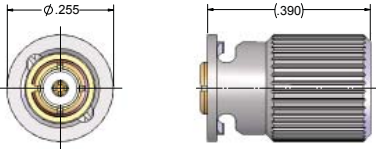
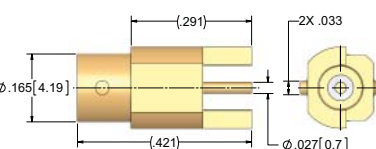
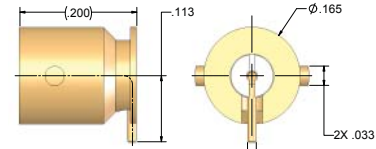
Amphenol
SV MICROWAVE
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with a Twist!

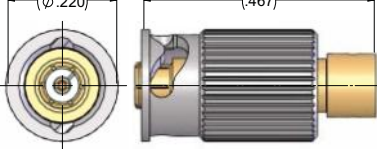
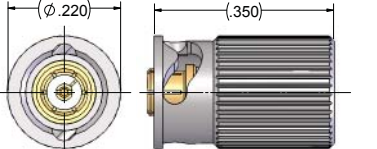
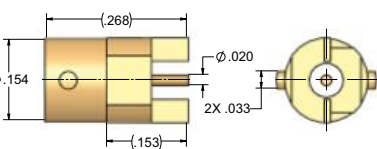
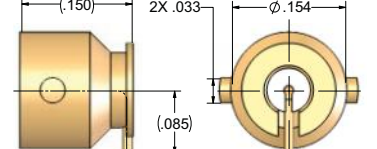
ELECTRICAL/MECHANICAL SPECIFICATIONS

CHARACTERISTICS	SMP	SMPM
Max Operating Frequency	40 GHz	65 GHz
VSWR (Cable Connectors) DC-18 GHz	1.2:1	1.1:1
Engage/Disengage Force (lbs)	2.0/0.5 lbs Max	2.5/1.5 lbs Typical
Durability (Mating Cycles)	1000 Min	500 Min
Temperature Rating	-65°C to +165°C	-65°C to +165°C

SMP STYLE CONNECTORS

P/N Description	Drawing
P/N: 1221-40049 Ø.086" Cable Female	
P/N: 1221-40051 Ø.047" Cable Female	
P/N: 1211-66195 Male Edge Mount	
P/N: 1211-40032 Male Surface Mount	

SMPM STYLE CONNECTORS

P/N Description	Drawing
P/N: 3221-60004 Ø.086" Cable Female	
P/N: 3221-60003 Ø.047" Cable Female	
P/N: 3211-60118 Male Edge Mount	
P/N: 3211-60112 Male Surface Mount	

*ADDITIONAL PART NUMBERS AVAILABLE ON OUR WEBSITE AND BY REQUEST