

(0.635 mm) .025"

QFS SERIES

# RUGGED GROUND PLANE SOCKET

## SPECIFICATIONS

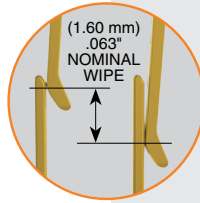
For complete specifications and recommended PCB layouts see [www.samtec.com?QFS](http://www.samtec.com?QFS)

- Insulator Material:** Liquid Crystal Polymer
- Contact & Ground Plane Material:** Phosphor Bronze
- Plating:** Au over 50 μ" (1.27 μm) Ni (Tin on Ground Plane Tail)
- Current Rating:** Contact: 2.6 A per pin (1 pin powered per row) Ground Plane: 15.7 A per ground plane (1 ground plane powered)
- Voltage Rating:** 300 VAC mated with QMS
- Operating Temp:** -55 °C to +125 °C
- RoHS Compliant:** Yes

**Board Mates:**  
QMS

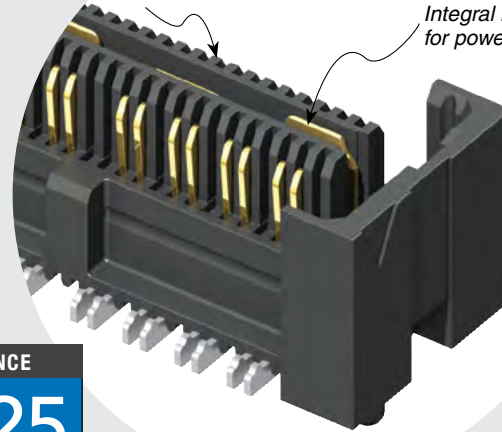
**Cable Mates:**  
6QCQD

**Standoffs:**  
SO, JSOM



Increased insertion depth for rugged applications

Integral metal plane for power or ground



## HIGH-SPEED CHANNEL PERFORMANCE

QMS-DP/QFS-DP @ 10 mm Mated Stack Height  
Rating based on Samtec reference channel. For full SI performance data visit [Samtec.com](http://Samtec.com) or contact [SIG@samtec.com](mailto:SIG@samtec.com)

25 Gbps

**ALSO AVAILABLE**  
(MOQ Required)

- Other platings
  - Without PCB Alignment Pins
  - Hot Pluggable
  - 4 banks (104 -SE, 64 -DP)
- Contact Samtec.

## PROCESSING

- Lead-Free Solderable:** Yes
- SMT Lead Coplanarity:** (0.10 mm) .004" max (026-078)
- Board Stacking:** For applications requiring more than two connectors per board contact [ipg@samtec.com](mailto:ipg@samtec.com)

## RECOGNITIONS

For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)



## STANDARDS

- SUMIT™
- PCI/104-Express™

## PROTOCOLS

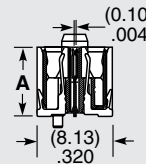
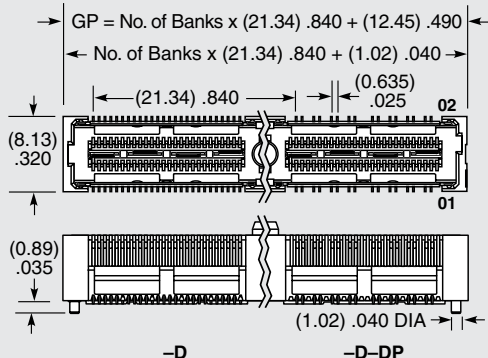
- 100 GbE
- Fibre Channel
- XAUI
- PCI Express®
- SATA

**Note:** Some lengths, styles and options are non-standard, non-returnable.

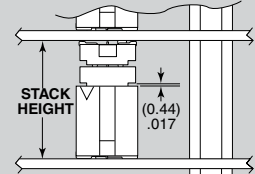
<b>QFS</b>	<b>PINS PER ROW NO. OF PAIRS</b>	<b>LEAD STYLE</b>	<b>PLATING OPTION</b>	<b>TYPE</b>	<b>A</b>	<b>OTHER OPTION</b>
	-026, -052, -078 (52 total pins per bank = -D)		-L (-04.25 lead style only) = 10 μ" (0.25 μm) Gold on Signal Pins and Ground Plane (Tin on Signal Pin tails, and Ground Plane tails)	-D = Single-Ended		-GP = Guide Holes (-04.25 lead style only)
	-016, -032, -048 (16 pairs per bank = -D-DP)	Specify LEAD STYLE from chart	-SL (-06.25 lead style only) = 10 μ" (0.25 μm) Gold on Signal Pins and Ground Plane (Tin on Signal Pin tails, and Ground Plane tails)	-D-DP = Differential Pair (-04.25 lead style only)		

LEAD STYLE	A	MATED HEIGHT*		
		-05.75	-06.75	-09.75
-04.25	(7.44) .293	10 mm	11 mm	14 mm
-06.25	(9.42) .371	12 mm	13 mm	16 mm

\*Processing conditions will affect mated height. See SO Series for board space tolerances.



## APPLICATION



Requires Standoff  
SO-1524-03-01-01-L or JSOM-1524-02 for 15.24 mm or SO-2215-02-01-01-L for 22 mm board spacing. Connectors designed to not fully seat when mated.

INDUSTRY STANDARD	INTERCONNECTS			
	TERMINAL	SOCKET	BANKS	STACK HEIGHT
SUMIT™	ASP-129637-01	ASP-129646-01	1	15.24 mm
PCI/104-Express™	ASP-129637-03	ASP-129646-03	3	15.24 mm
PCI/104-Express™	ASP-129637-13	ASP-129646-22	1	15.24 mm
PCI/104-Express™	ASP-142781-02	ASP-129646-02	2	22 mm
PCI/104-Express™	ASP-142781-03	ASP-129646-03	3	22 mm