

(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  
(2 pins powered)  
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

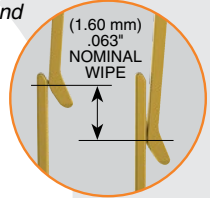
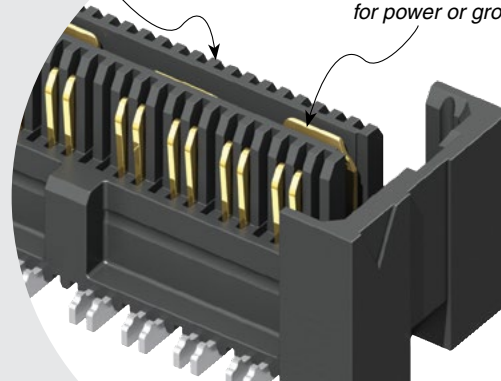
**Cable Mates:**  
6QCD

**Standoffs:**  
SO, JSOM

**POWER/SIGNAL APPLICATION**

Compatible with UMPT/UMPS for flexible two-piece power/signal solutions

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

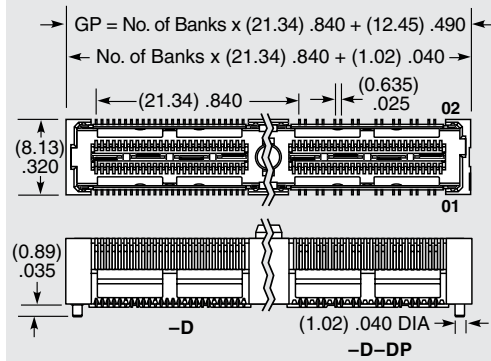
- SUMIT™
- PCI/104-Express™

## 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>
		Specify LEAD STYLE from chart	<b>-L</b> (-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)	<b>-D</b> = Single-Ended		<b>-GP</b> = Guide Holes (-04.25 lead style only)
	<b>-026, -052, -078</b> (52 total pins per bank = -D)		<b>-SL</b> (-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)	<b>-D-DP</b> = Differential Pair (-04.25 lead style only)		
	<b>-016, -032, -048</b> (16 pairs per bank = -D-DP)					



**APPLICATION**

STACK HEIGHT (0.44) .017

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.

MATED HEIGHT*					
LEAD STYLE	A	QMS LEAD STYLE			
		-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.

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-142781-01	ASP-129646-01	1	22 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

Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

All parts within this catalog are built to Samtec's specifications. Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.