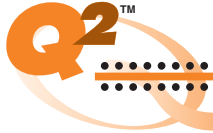


(0,635 mm) .025"

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 50µ" (1,27 µm) Ni (Tin on Ground Plane Tail)

**Current Rating:**

Contact: 1.6A @ 95°C  
Ground Plane: 9.2A @ 95°C

**Voltage Rating:**

300 VAC mated with QMS

**Operating Temp:**

-55°C to +125°C

**RoHS Compliant:**

Yes

**Processing:**

Lead-Free Solderable:

Yes

**SMT Lead Coplanarity:**

(0,10 mm) .004" max (026-078)  
(0,15 mm) .006" max (104)

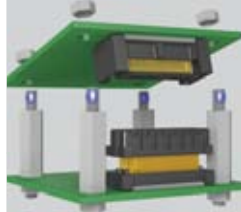
**Board Stacking:**

For applications requiring more than two connectors per board or 4 banks or more, contact [ipg@samtec.com](mailto:ipg@samtec.com)

**Board Mates:**  
QMS

**Cable Mates:**  
Q2DA, 6QCD, 6QDP, 6QP

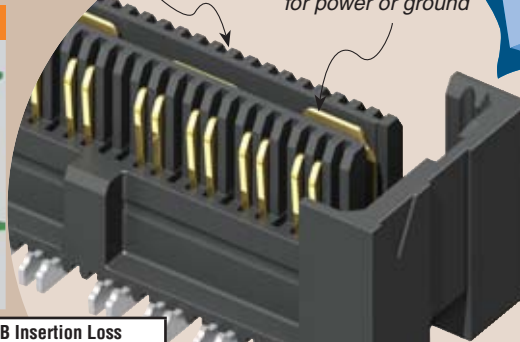
## APPLICATIONS



See SO Series for precision mated standoffs.

Increased insertion depth for rugged applications

Integral metal plane for power or ground



QMS/QFS 10 mm Stack Height	Type	Rated @ 3dB Insertion Loss	
		with PCB effects*	w/o PCB effects**
Single-Ended Signaling	-D	9 GHz / 18 Gbps	8.5 GHz / 17 Gbps
Differential Pair Signaling	-D	8 GHz / 16 Gbps	8.5 GHz / 17 Gbps
Differential Pair Signaling	-DP	7.5 GHz / 15 Gbps	—

\*Performance data includes effects of a non-optimized PCB.  
\*\*Test board losses de-embedded from performance data.

Performance data for other stack heights and complete test data available at [www.samtec.com?QFS](http://www.samtec.com?QFS) or contact [sig@samtec.com](mailto:sig@samtec.com)



## APPLICATION SPECIFIC

- Power & RF options
  - Edge Mount
  - Guide Posts
  - Without PCB Alignment Pins
  - Hot Pluggable
- Call Samtec.

QFS	PINS PER ROW NO. OF PAIRS	LEAD STYLE	PLATING OPTION	TYPE	A	OTHER OPTION
	-026, -052, -078, -104 (52 total pins per bank = -D)	Specify LEAD STYLE from chart	-L (-04.25 lead style only) = 10µ" (0,25 µm) Gold on Signal Pins and Ground Plane (Tin on Signal Pin tails, and Ground Plane tails)	-D = Single-Ended  -D-DP = Differential Pair (-04.25 only)		-GP = Guide Holes (-052 pin and -04.25 lead style only for mating with 6QP Series assembly. Call Samtec for other sizes)
	-016, -032, -048, -064 (16 pairs per bank = -D-DP)		-SL (-06.25 lead style only) = 10µ" (0,25 µm) Gold on Signal Pins and Ground Plane (Tin on Signal Pin tails, and Ground Plane tails)			

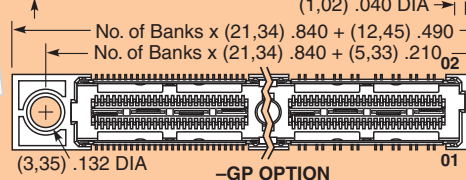
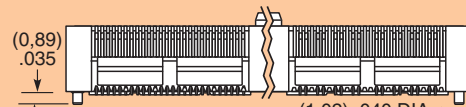
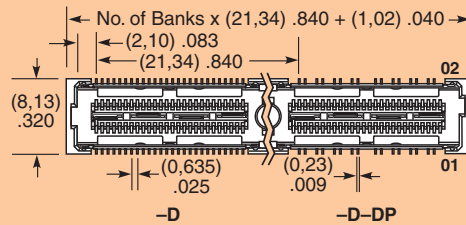
**Industry Standards**

StackableUSB™  
SUMIT™  
PCI/104-Express™

**Protocols Supported**

Fibre Channel  
XAUI  
PCI Express®  
SATA

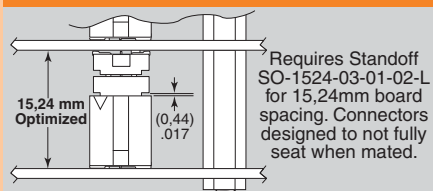
Download app notes at [www.samtec.com/appnote](http://www.samtec.com/appnote)  
Contact SIG @ samtec.com for questions on protocols



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.

## APPLICATION



INDUSTRY STANDARD	INTERCONNECTS	
	TERMINAL	SOCKET
Stackable USB™	ASP-129637-01	ASP-129646-01
SUMIT™	ASP-129637-01	ASP-129646-01
PCI/104-Express™	ASP-129637-03	ASP-129646-03

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

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

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