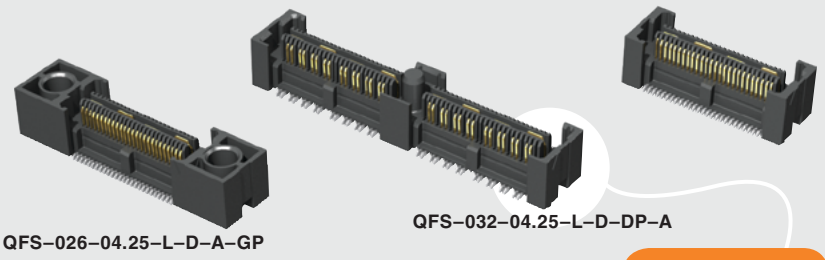
samtec

Q2™



(0.635 mm) .025"

QFS SERIES

RUGGED GROUND PLANE SOCKET

SPECIFICATIONS

For complete specifications and recommended PCB layouts see 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

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

RECOGNITIONS

For complete scope of recognitions see www.samtec.com/quality

FILE NO. E111594

STANDARDS

- SUMIT™
- PCI/104-Express™
- PCI/104-Express™ OneBank

Visit www.samtec.com/standards for more information.

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

Board Mates:
QMS

Cable Mates:
6QCD

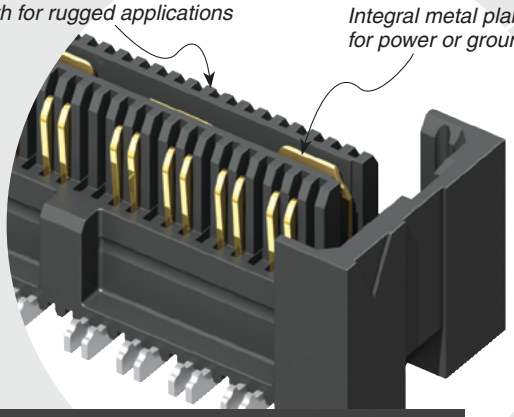
Standoffs:
SO, JSOM

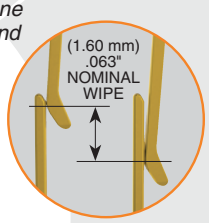
POWER/SIGNAL APPLICATION

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 or contact SIG@samtec.com

25 Gbps

ALSO AVAILABLE (MOQ Required)

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

QFS	–	PINS PER ROW NO. OF PAIRS	–	LEAD STYLE	–	PLATING OPTION	–	TYPE	–	A	–	OTHER OPTION

–026, –052, –078
(52 total pins per bank = –D)

–016, –032, –048
(16 pairs per bank = –D–DP)

Specify LEAD STYLE from chart

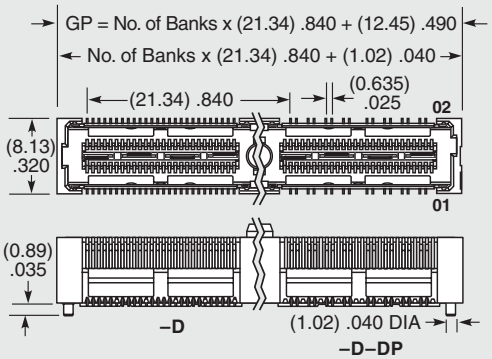
–L
(–04.25 lead style only)
= 10 µ" (0.25 µm) Gold on Signal Pins and Ground Plane (Tin on Signal Pin tails, and Ground Plane tails)

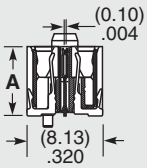
–SL
(–06.25 lead style only)
= 10 µ" (0.25 µm) Gold on Signal Pins and Ground Plane (Tin on Signal Pin tails, and Ground Plane tails)

–D
= Single-Ended

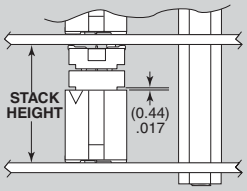
–D–DP
= Differential Pair
(–04.25 lead style only)

–GP
= Guide Holes (–04.25 lead style only)





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.

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.

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.