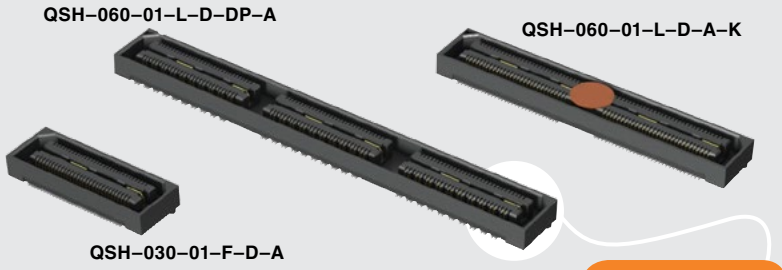
samtec

QSTRIP®

(0.50 mm) .0197"



QSH SERIES

HIGH-SPEED GROUND PLANE SOCKET

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com?QSH

Insulator Material: Liquid Crystal Polymer
Contact Material: Phosphor Bronze
Plating: Au or Sn over 50 µ" (1.27 µm) Ni
Current Rating:
Contact:
2 A per pin
(2 pins powered)
Ground Plane:
25 A per ground plane
(1 ground plane powered)
Operating Temp Range: -55 °C to +125 °C
Voltage Rating: 175 VAC (5 mm Stack Height)
Max Cycles: 100
RoHS Compliant: Yes

PROCESSING

Lead–Free Solderable: Yes
SMT Lead Coplanarity: (0.10 mm) .004" max (020-060)
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

FILE NO: 090871_0_000

PROTOCOLS

- 100 GbE
- Hypertransport™
- XAUI
- PCI Express®
- InfiniBand™

ALSO AVAILABLE (MOQ Required)

- 15 mm, 22 mm and 30 mm stack height
- 30 µ" (0.76 µm) Gold (Specify -H plating for Data Rate cable mating applications.)
- Edge Mount & Guide Posts
- 80 (-DP), 120, 150 positions per row
- Retention Option

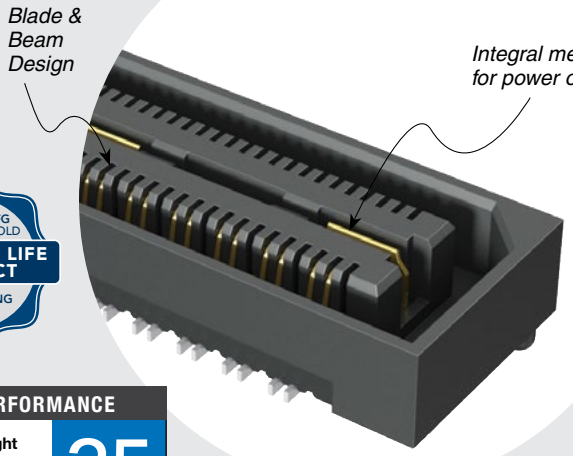
Contact Samtec.

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

Board Mates:
QTH

Cable Mates:
HQCD, HQDP
(See Also Available Note)

Standoffs:
SO



10 YEAR MFG WITH 50 µ" GOLD
EXTENDED LIFE PRODUCT
HIGH MATING CYCLES

HIGH-SPEED CHANNEL PERFORMANCE

QTH/QSH @ 5 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

POWER/SIGNAL APPLICATION



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

QSH	–	PINS PER ROW NO. OF PAIRS	–	01	–	PLATING OPTION	–	TYPE	–	A	–	OTHER OPTION

–030, –060, –090
(60 total pins per bank = –D)

–020, –040, –060
(20 pairs per bank = –D–DP)

–F
= Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails

–L
= 10 µ" (0.25 µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails

–C*
= Electro-Polished Selective 50 µ" (1.27 µm) min Au over 150 µ" (3.81 µm) Ni on Signal Pins in contact area, 10 µ" (0.25 µm) min Au over 50 µ" (1.27 µm) Ni on Ground Plane in contact area, Matte Tin over 50 µ" (1.27 µm) min Ni on all solder tails

***Note:** –C Plating passes 10 year MFG testing

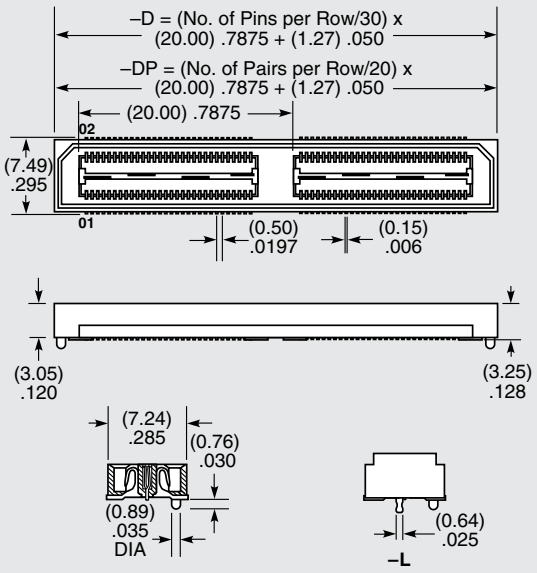
–D
= Single-Ended

–D–DP
= Differential Pair (–01 only)

–K
= (8.25 mm) .325" DIA Polyimide Film Pick & Place Pad

–TR
= Tape & Reel (–090 positions maximum)

–L
= Latching Option (Not available on –060 (–D–DP) & –090 positions)



QTH LEAD STYLE	MATED HEIGHT WITH QSH*
–01	(5.00) .197
–02	(8.00) .315
–03	(11.00) .433
–04	(16.00) .630
–05	(19.00) .748
–07	(25.00) .984
–09	(14.00) .551

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

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.