

(0.50 mm) .0197"

QTH-060-07-F-D-A

QTH-030-01-L-D-A

QTH-090-01-C-D-A

QTH SERIES

HIGH-SPEED GROUND PLANE HEADER

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com/QTH

Insulator Material:
Liquid Crystal Polymer

Terminal Material:
Phosphor Bronze

Plating:

Au or Sn over 50 μ " (1.27 μ m) 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

Board Mates:

QSH

Cable Mates:

HQCD, HQDP

(See Also Available Note)

Standoffs:

SO



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

Integral metal plane for
power or ground

Standard Stack Heights
from 5 mm to 25 mm

POWER/SIGNAL APPLICATION

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

PROCESSING

Lead-Free Solderable: Yes
SMT Lead Coplanarity:
(0.10 mm) .004" max (030-060)
(0.15 mm) .006" max (090)*
*(.004" stencil solution
may be available; contact
IPG@samtec.com)

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



STANDARDS

- PISMO™ 1

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

ALSO AVAILABLE (MOQ Required)

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

Note:

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

QTH — PINS PER ROW NO. OF PAIRS — LEAD STYLE — PLATING OPTION — TYPE — A — OTHER OPTION

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

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

Specify
LEAD
STYLE
from
chart

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

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

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

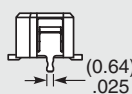
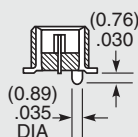
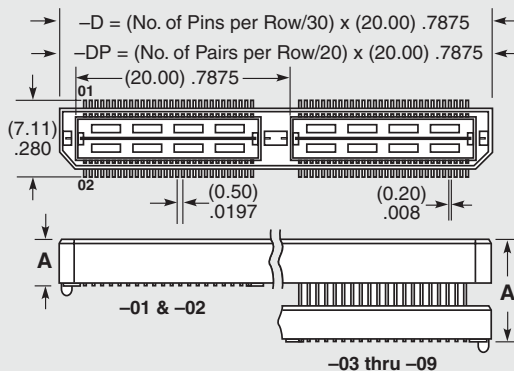
—D
= Single-Ended

—D-DP
= Differential Pair
(-01 only)

—K
= (7.00 mm)
.275" DIA
Polyimide
film Pick &
Place Pad
(N/A with -05 &
-07 lead style)

—TR
= Tape & Reel
(-090 positions
maximum)

—L
= Latching
Option
(-01 lead
style only)
(N/A on
-060 (-D-DP)
& -090)



*Note:
—C Plating passes
10 year MFG testing

QTH LEAD STYLE	A	HEIGHT WITH QSH*
-01	(4.27) .168	(5.00) .197
-02	(7.26) .286	(8.00) .315
-03	(10.27) .404	(11.00) .433
-04	(15.25) .600	(16.00) .630
-05	(18.26) .718	(19.00) .748
-07	(24.24) .954	(25.00) .984
-09	(13.26) .522	(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.

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.