

0,50mm HI-SPEED HEADER QTH, CQTH SERIES

SPECIFICATIONS

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

QTH

Insulator Material:

Liquid Crystal Polymer

Terminal Material:

Phosphor Bronze

Plating:

Au over 50µ" (1,27µm) Ni

Current Rating:

Contact: 1.0A @ 30°C

Temperature Rise

Ground Plane: 7.8A @ 30°C

Temperature Rise

Operating Temp Range:

-55°C to +125°C

Voltage Rating:

125 VAC (5mm Stack Height)

Max Cycles: 100

Unmating Force (-RT1 option):

-RT1 option increases

unmating force up to 50%

RoHS Compliant: Yes

Processing:

Max Processing Temp:

230°C for 60 seconds, or

260°C for 20 seconds 3x

Lead-Free Solderable: Yes

SMT Lead Coplanarity:

(0,10mm) .004" max (030-060)

(0,15mm) .006" max (090-120)

Board Stacking:

For applications requiring more than two connectors per board or 120 positions or higher, contact ipg@samtec.com

Mates with:
QSH, CQSH, HFHM,
HFHM2, HQCD
(See Application
Specific note)



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

Integral metal plane for power or ground

(0,50mm)
.0197" pitch

Retention Option

Standard Stack Heights from 5mm to 25mm

Polarized



5mm Stack Height	Rated @ -3dB Insertion Loss
Single-Ended Signaling	9 GHz / 18 Gbps
Differential Pair Signaling	8 GHz / 16 Gbps
Performance data for other stack heights available at www.samtec.com/QTH	

ALSO AVAILABLE

Differential Pair version. See QTH-DP Series.
Board Spacing Standoffs. See SO Series.

SPECIFICATIONS

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

CQTH

Same as QTH except:

UL & CSA certification pending

Plating:

Electro-Polished Selective

Max Cycles: 25

APPLICATION SPECIFIC OPTION

- 14mm, 15mm, 22mm and 30mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
 - 30µ" (0,76µm) Gold (Specify -H plating for Data Rate cable mating applications. QTH only)
 - Edge Mount & Guide Posts (QTH only)
 - 150 positions per row (QTH only)
- Call Samtec.

TYPE STRIP — NO. OF POSITIONS PER ROW — LEAD STYLE — PLATING OPTION — D — A — OTHER OPTION

—030, —060, —090, —120
(60 total positions per bank)

Specify LEAD STYLE from chart.

QTH
(Requires -L or -F plating)

CQTH
(Requires -C plating)

QTH LEAD STYLE	A	HEIGHT WITH QSH
-01	(4,27) .168	(5,00) .198
-02	(7,26) .286	(8,00) .316
-03	(10,27) .404	(11,00) .433
-04	(15,25) .600	(16,00) .630
-05	(18,24) .718	(19,00) .748
-07	(24,24) .954	(25,00) .984

—L
= 10µ" (0,25µm)
Gold on Signal Pins
and Ground Plane,
Matte Tin on tails
(QTH only)

—F
= Gold Flash on
Signal Pins and
Ground Plane,
Matte Tin on tails
(QTH only)

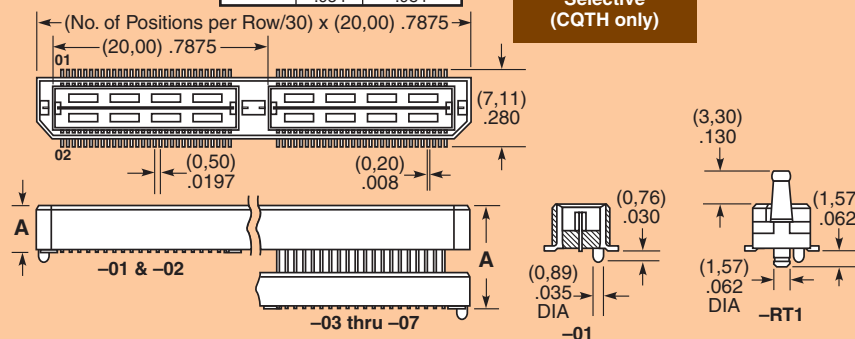
—C
= Electro-Polished
Selective
(CQTH only)

QTH Series Only

—K
= (7,00mm) .275" DIA
Polyimide film
Pick & Place Pad

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

—RT1
= Retention Option
(—01 Lead Style only &
—090 positions maximum)



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

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