

# 0,50mm DIFFERENTIAL PAIR QSH-DP SERIES

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?QSH-DP](http://www.samtec.com?QSH-DP)

**Insulator Material:** Liquid Crystal Polymer  
**Contact 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 mated with QTH-DP & 5mm Stack Height  
**RoHS Compliant:** Yes

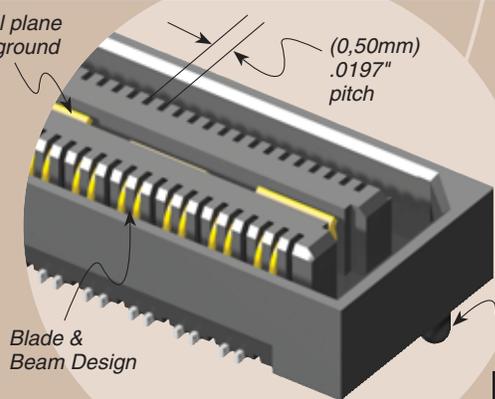
### Processing:

**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 (020-060) (0,15mm) .006" max (080)  
**Board Stacking:** For applications requiring more than two connectors per board or 80 pairs or higher, contact [ipg@samtec.com](mailto:ipg@samtec.com)

**Mates with:** QTH-DP, HQDP, HFHM, HFHM2 (See Application Specific note)



Integral metal plane for power or ground



## STACK HEIGHT

LEAD STYLE	STANDARD MATED HEIGHT
-01	(5,00) .198

Processing conditions will affect mated height.

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

## ALSO AVAILABLE

Board Spacing Standoffs. See SO Series.

0,50mm QTH/QSH-DP	Rated @ -3dB Insertion Loss
5mm Stack Height	
Differential Pair Signaling	9.5 GHz / 19 Gbps
Performance data for other stack heights available at <a href="http://www.samtec.com?QSH-DP">www.samtec.com?QSH-DP</a>	

**QSH** - **NO. OF PAIRS** - **01** - **PLATING OPTION** - **D** - **DP** - **A** - **OTHER OPTION**

**-020, -040, -060, -080**  
(20 pairs per bank)

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

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

**-K**  
= (8,25mm) .325" DIA Polyimide Film Pick & Place Pad

**-TR**  
= Tape & Reel (-060 positions maximum)

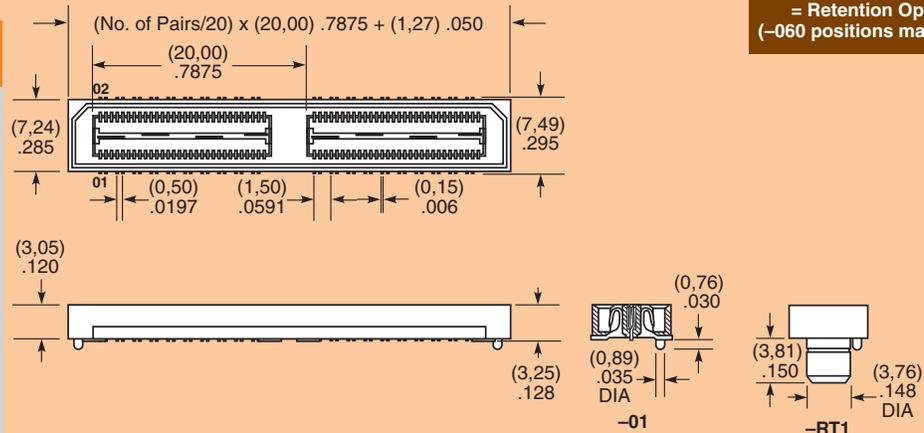
**-RT1**  
= Retention Option (-060 positions maximum)



## APPLICATION SPECIFIC OPTION

- 30µ" (0,76µm) Gold (Specify -H plating for Data Rate cable mating applications)
- 8mm, 11mm, 14mm, 15mm, 16mm, 19mm, 22mm, 25mm and 30mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
- 100 Pairs
- Edge Mount and Guide Posts
- "Partitionable" (combine differential & single-ended)

Call Samtec.



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

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