

QSH-060-01-L-D-RA

QSH-090-01-F-D-RA-GP

QSH-020-01-F-D-DP-RA

QSH-RA SERIES

(0.50 mm) .0197"

# RIGHT-ANGLE GROUND PLANE SOCKET

## SPECIFICATIONS

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

**Insulator Material:**  
Black Liquid Crystal Polymer

**Terminal Material:**  
Phosphor Bronze

**Weld Tab:**  
Phosphor Bronze

**Ground Plane:**  
Phosphor Bronze

**Plating:**  
Au or Sn over

50 μ" (1.27 μm) Ni

**Current Rating:**  
Contact:

2.2 A per pin

(2 pins powered)

Ground Plane:

21.8 A per ground plane

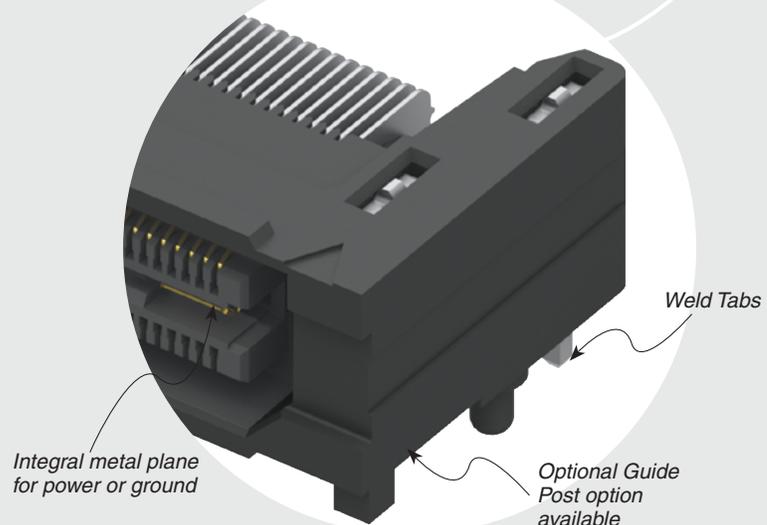
(1 ground plane powered)

**Operating Temp Range:**  
-55 °C to +125 °C

**Voltage Rating:**  
220 VAC

**RoHS Compliant:**  
Yes

**Board Mates:**  
QTH

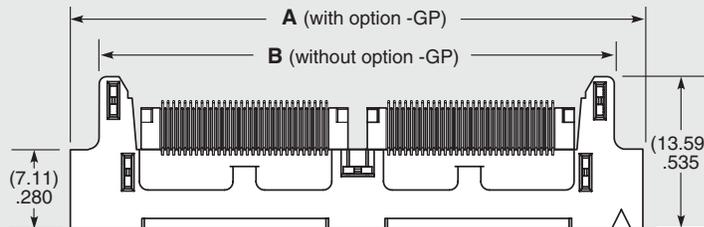


## PROCESSING

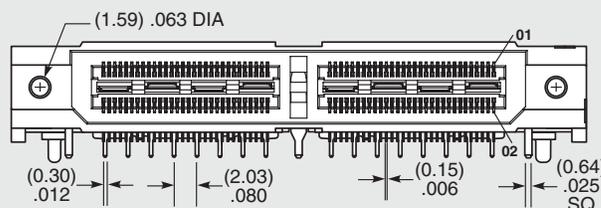
**Lead-Free Solderable:**  
Yes

**SMT Lead Coplanarity:**  
(0.10 mm) .004" max (020-090)

<b>QSH</b>	<b>PINS PER ROW NO. OF PAIRS</b>	<b>01</b>	<b>PLATING OPTION</b>	<b>TYPE</b>	<b>RA</b>	<b>OTHER OPTION</b>
	<p><b>-030, -060, -090</b> -D = (60 total pins per bank)</p> <p><b>-020, -040, -060</b> -D-DP = (20 pairs per bank)</p>		<p><b>-F</b> = Gold Flash on contact, Matte Tin on tails</p> <p><b>-L</b> = 10 μ" (0.25 μm) Gold contact, Matte Tin on tails</p>	<p><b>-D</b> = Single-Ended</p> <p><b>-D-DP</b> = Differential Pair</p>		<p><b>-GP</b> = Guide Post Holes</p> <p><b>-K</b> = (6.50 mm) .256" DIA Polyimide film Pick &amp; Place Pad</p>



NO. OF PAIRS	PINS PER ROW	A	B
-020	-030	(30.80) 1.213	(25.72) 1.013
-040	-060	(50.80) 2.000	(45.72) 1.800
-060	-090	(70.80) 2.788	(65.72) 2.588



-GP OPTION SHOWN

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

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

[WWW.SAMTEC.COM](http://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.