

(0.50 mm) .0197"

QSH-060-01-L-D-RA

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

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

QSH-RA SERIES

# 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  $\mu$ " (1.27  $\mu$ m) Ni

**Current Rating:**  
Contact:  
2.2 A per pin  
(2 pins powered)

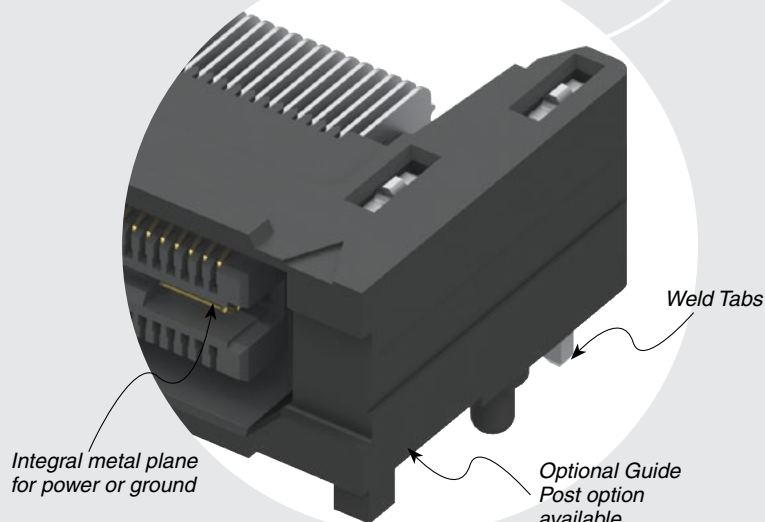
Ground Plane:  
21.8 A per ground plane  
(1 ground plane powered)

**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)

QSH

PINS PER ROW  
NO. OF PAIRS

01

PLATING  
OPTION

TYPE

RA

OTHER  
OPTION

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

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

–F

= Gold Flash  
on contact,  
Matte Tin on tails

–L

= 10  $\mu$ " (0.25  $\mu$ m)  
Gold contact,  
Matte Tin on tails

–D

= Single-  
Ended

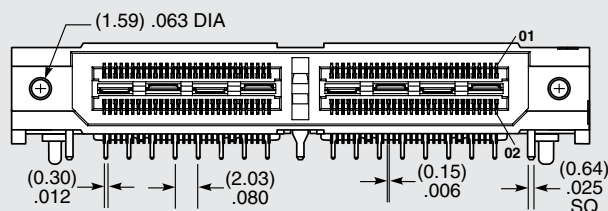
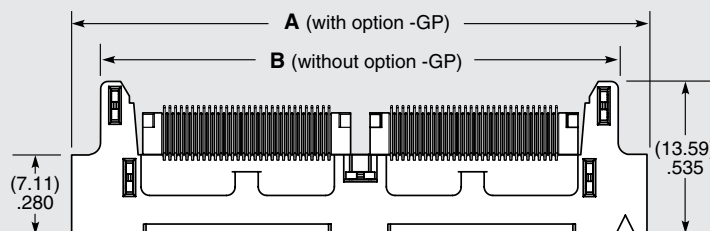
–D-DP  
= Differential  
Pair

–GP

= Guide Post  
Holes

–K

= (6.50 mm) .256"  
DIA Polyimide film  
Pick & Place Pad



–GP OPTION SHOWN

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

**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.