

# Q7P5HG-900R

SURFACE MOUNT 7.5dB DIRECTIONAL COUPLER

REV 1.0.0



## APPLICATIONS

- Signal sampling
- Signal injection
- Source leveling
- Signal isolation
- Power monitoring
- Reflection measurement

## FEATURES

- Broadband 695 -1000 MHz
- High power
- Very low loss
- High directivity
- Flat coupling
- Dimensionally stable materials for best CTE match
- Lead-Free, RoHS compliant

## SPECIFICATIONS

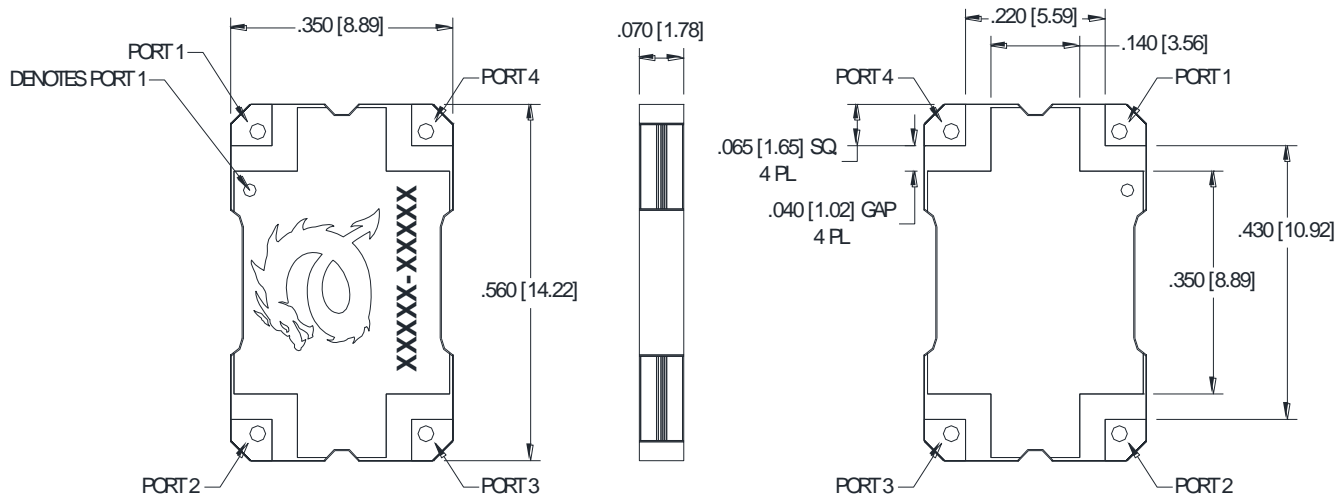
TABLE 1: TYPICAL SPECIFICATIONS\*

FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	MEAN COUPLING (dB)	FREQUENCY SENSITIVITY (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)	ΘJC (°C/W)
695-1000	175	<b>Q7P5HG-900R</b>	0.15	7.5 ± 0.75	± .75	24	1.15	-55 to +95	11.48

\* Units tested with small signal using Electro-Photonics test board at 25°C. Specifications subject to change without notice.

† Please consult sales ([sales@electro-photonics.com](mailto:sales@electro-photonics.com)) for custom footprints, sizes, and/or specifications.

## MECHANICAL OUTLINE

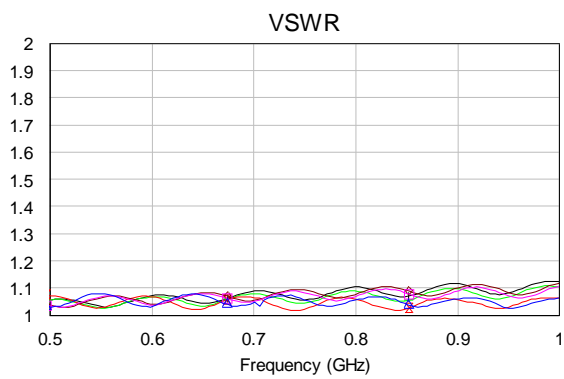
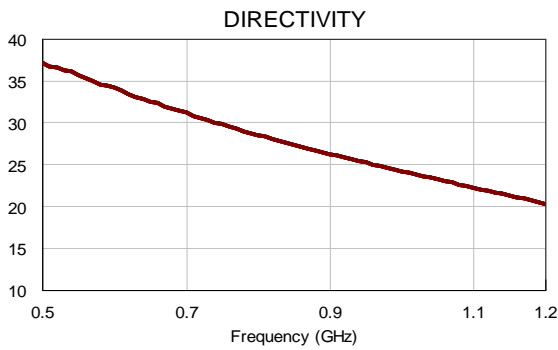
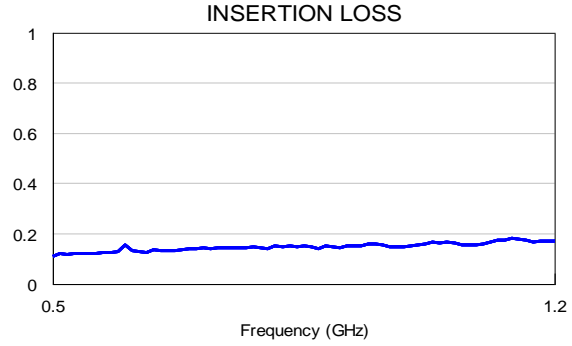
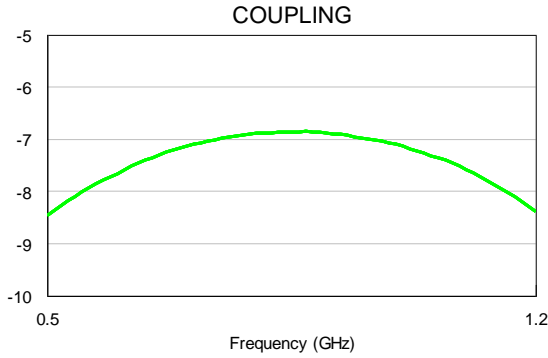


# Q7P5HG-900R

SURFACE MOUNT 7.5dB DIRECTIONAL COUPLER

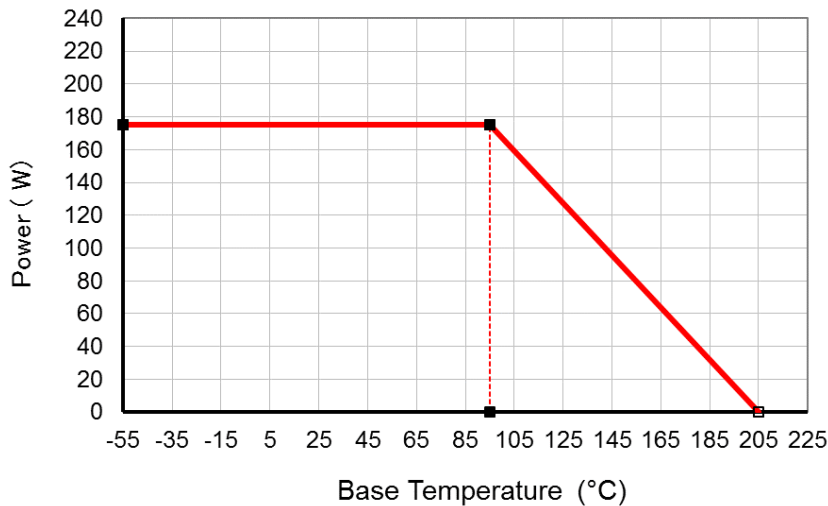
REV 1.0.0

## TYPICAL PERFORMANCE



## POWER DERATING

### POWER DERATING

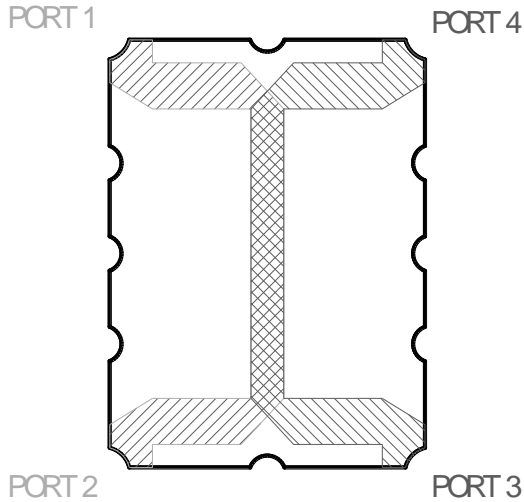


# Q7P5HG-900R

SURFACE MOUNT 7.5dB DIRECTIONAL COUPLER

REV 1.0.0

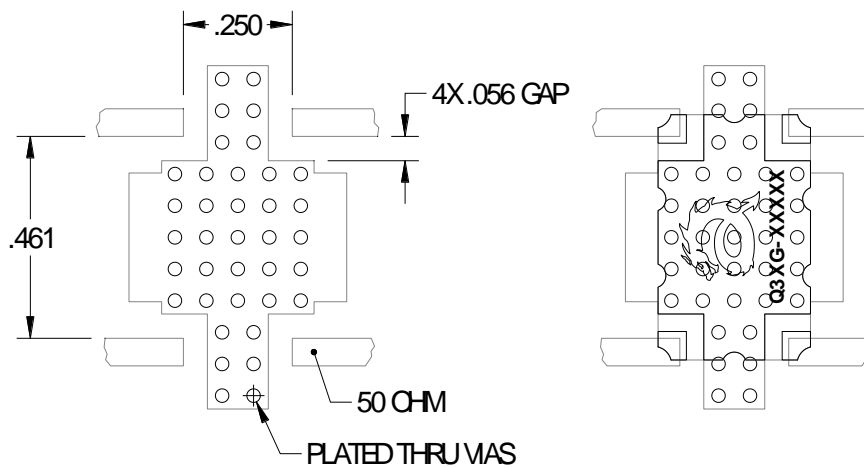
## PIN CONFIGURATION



PORT 1	PORT 2	PORT 3	PORT 4
IN	DIRECT	ISOLATED	COUPLED
DIRECT	IN	COUPLED	ISOLATED
ISOLATED	COUPLED	IN	DIRECT
COUPLED	ISOLATED	DIRECT	IN

## MOUNTING FOOTPRINT

Electro-Photonics test board is designed using 30 mil RO4350B material. Land pattern design must be taken into consideration when using a different thickness and/or dielectric constant in order to achieve optimal performance.



# Q7P5HG-900R

SURFACE MOUNT 7.5dB DIRECTIONAL COUPLER

REV 1.0.0

## ORDERING INFO\*

\* Consult sales ([sales@electro-photonics.com](mailto:sales@electro-photonics.com)) for custom configuration, size, footprint, and/or specifications. Tape & Reel available upon request (with minimum order quantities).

**Q 7 P 5 H G - 9 0 0 R**  
①                      ②                      ③                      ④

①	②	③	④
PRODUCT CODE	SIZE	FREQUENCY	PLATING
7.5dB DIRECTIONAL COUPLER	A = .250 X .200 K = .283 X .197 B = .560 X .200 G = .560 X .350 D = .650 X .480 E = 1.00 X .500	MHz  (SEE TABLE 1)	R = IMMERSION TIN  E = ENIG (Electroless nickel immersion gold)



The Q7P5HG-900R is lead free, RoHS compliant product.