

Q7P5HG-2100R

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 1800 -2200 MHz
- High power
- Very low loss
- High directivity
- Flat coupling
- Dimensionally stable materials for best CTE match
- Lead-Free, RoHS compliant

SPECIFICATIONS

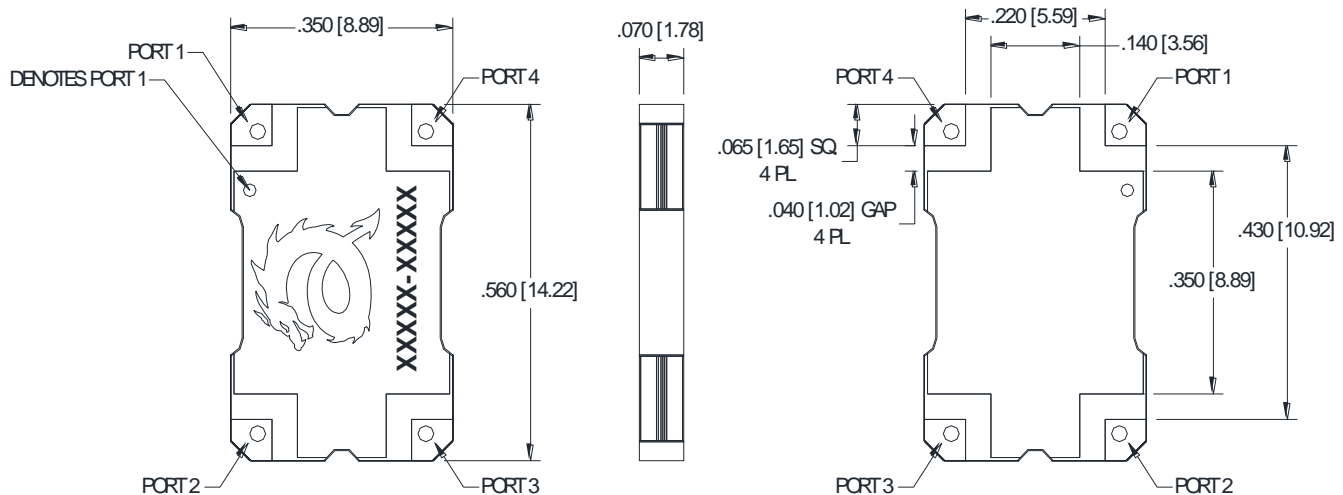
TABLE 1: TYPICAL SPECIFICATIONS*

FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	MEAN COUPLING (dB)	FREQUENCY SENSITIVITY (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)	ΘJC (°C/W)
1800-2200	175	Q7P5HG-2100R	0.15	7.5 ± 0.75	± .75	24	1.15	-55 to +95	14.15

* 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) for custom footprints, sizes, and/or specifications.

MECHANICAL OUTLINE

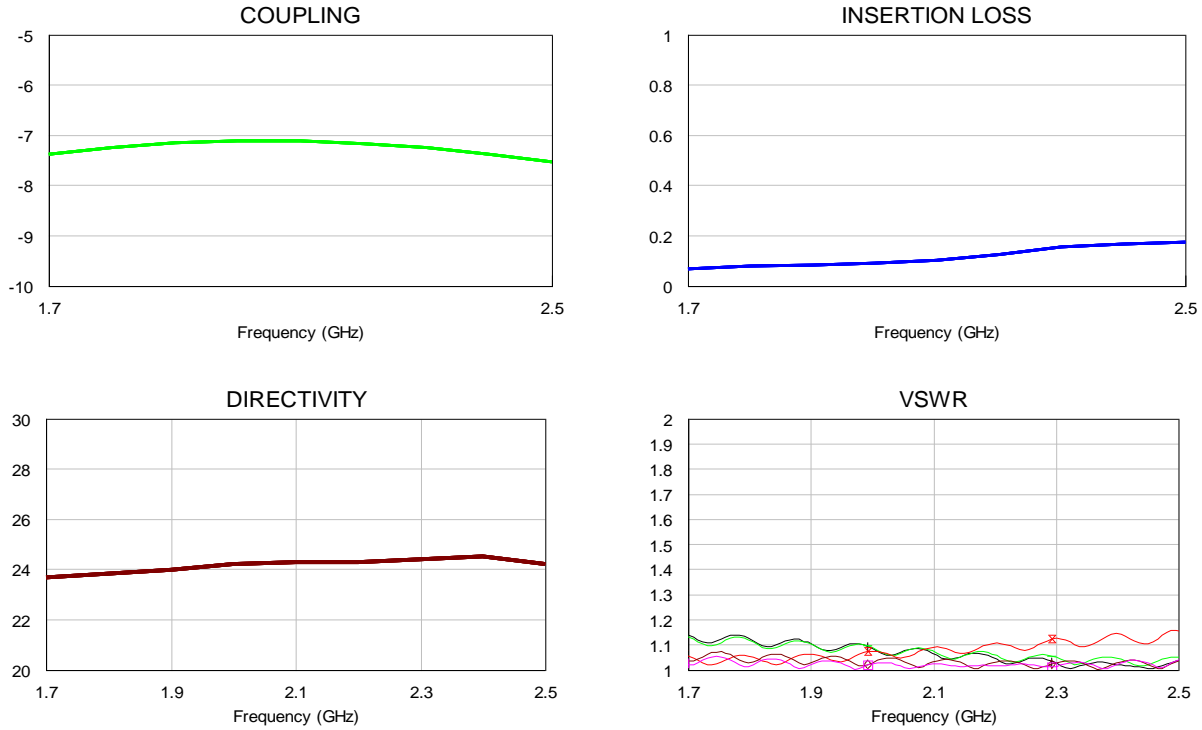


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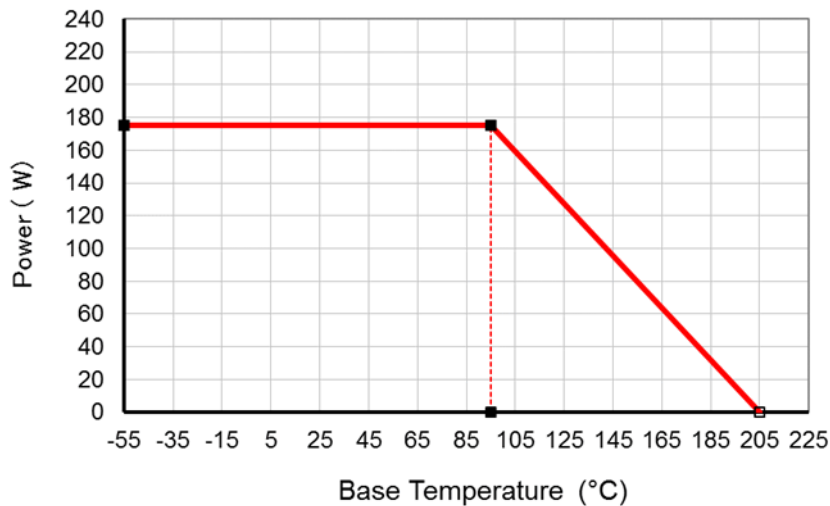
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TYPICAL PERFORMANCE



POWER DERATING

POWER DERATING

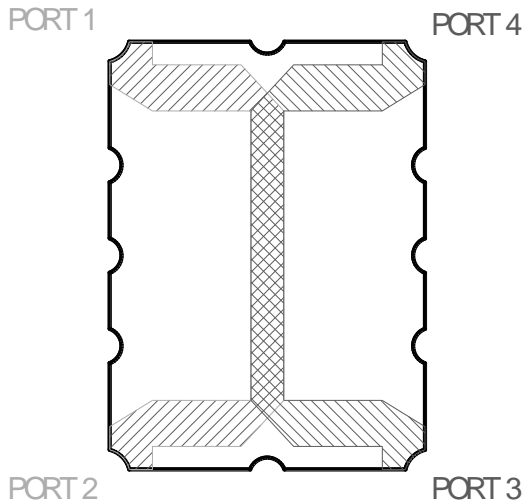


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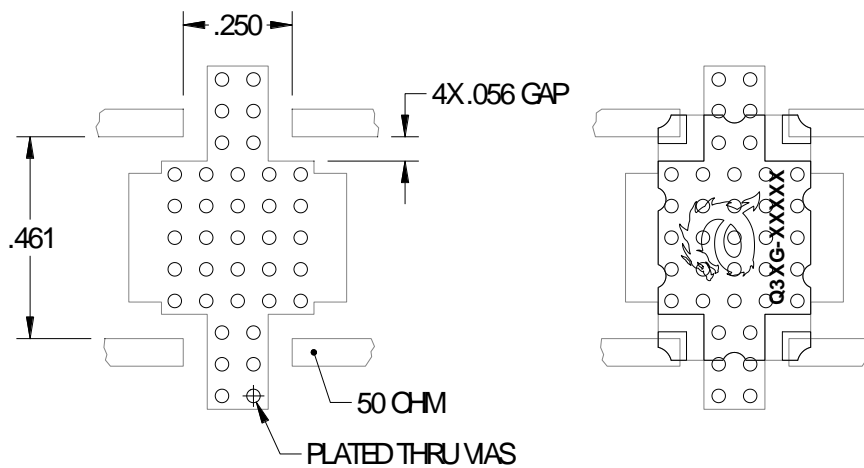
PIN CONFIGURATION



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.



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ORDERING INFO*

* Consult sales (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 - 2 1 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-2100R is lead free, RoHS compliant product.