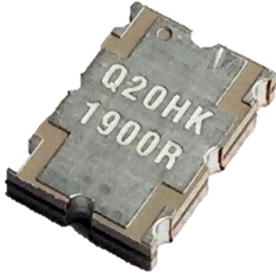


# Q20HK-1900R

SURFACE MOUNT 20dB DIRECTIONAL COUPLER

REV 1.0.0



## APPLICATIONS

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

## FEATURES

- 1800 - 2000 MHz
- High power
- Very low loss
- High directivity
- Flat coupling
- Compact and low profile
- Dimensionally stable materials for best CTE match
- Lead-Free, RoHS compliant

## SPECIFICATIONS

TABLE 1: TYPICAL SPECIFICATIONS\*

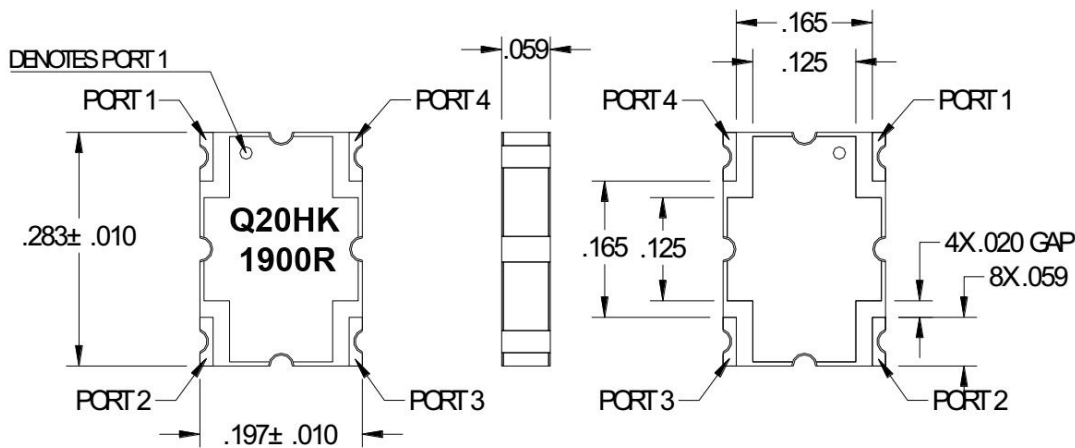
FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)	ΘJC (°C/W)
1800-2000	80	<b>Q20HK-1900R</b>	0.3	20 ± 0.5	20	1.30	-55 to +95	

\* 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

\* Dimensions are inches.

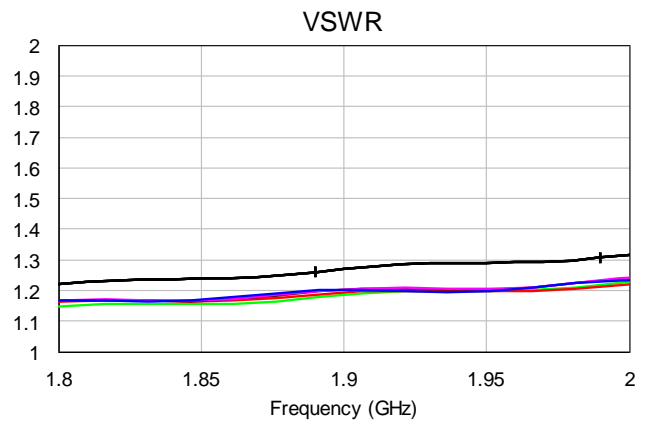
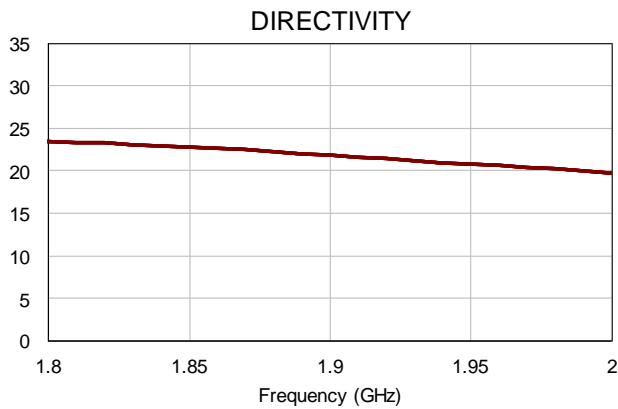
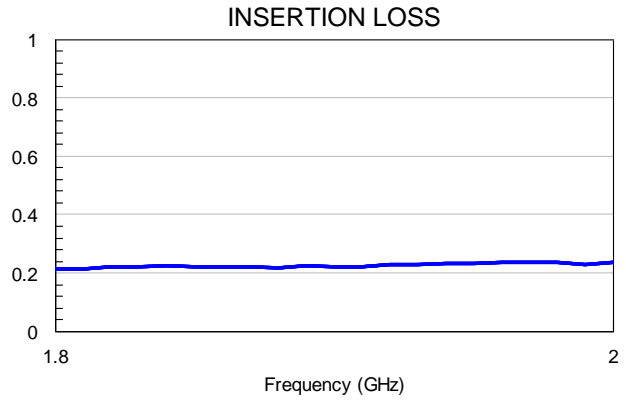
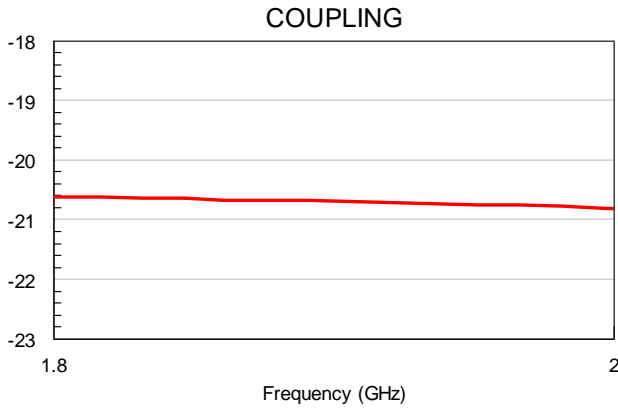


# Q20HK-1900R

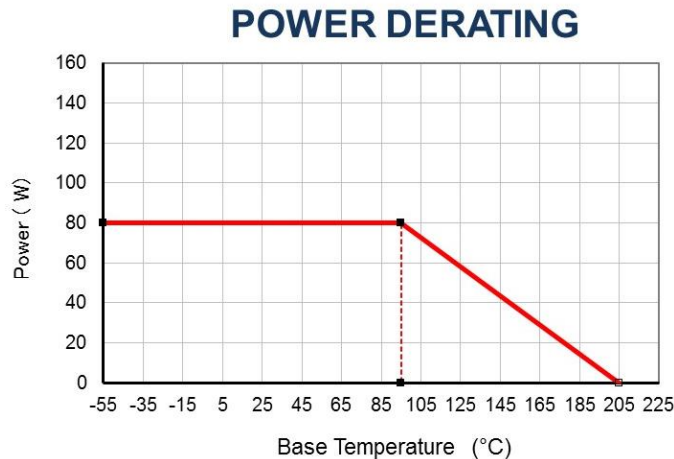
SURFACE MOUNT 20dB DIRECTIONAL COUPLER

REV 1.0.0

## TYPICAL PERFORMANCE



## POWER DERATING

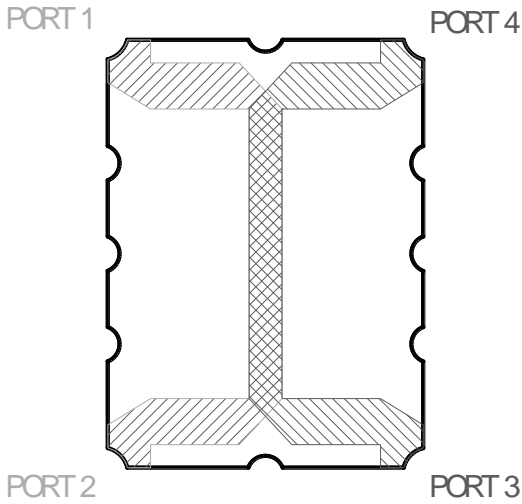


# Q20HK-1900R

SURFACE MOUNT 20dB DIRECTIONAL COUPLER

REV 1.0.0

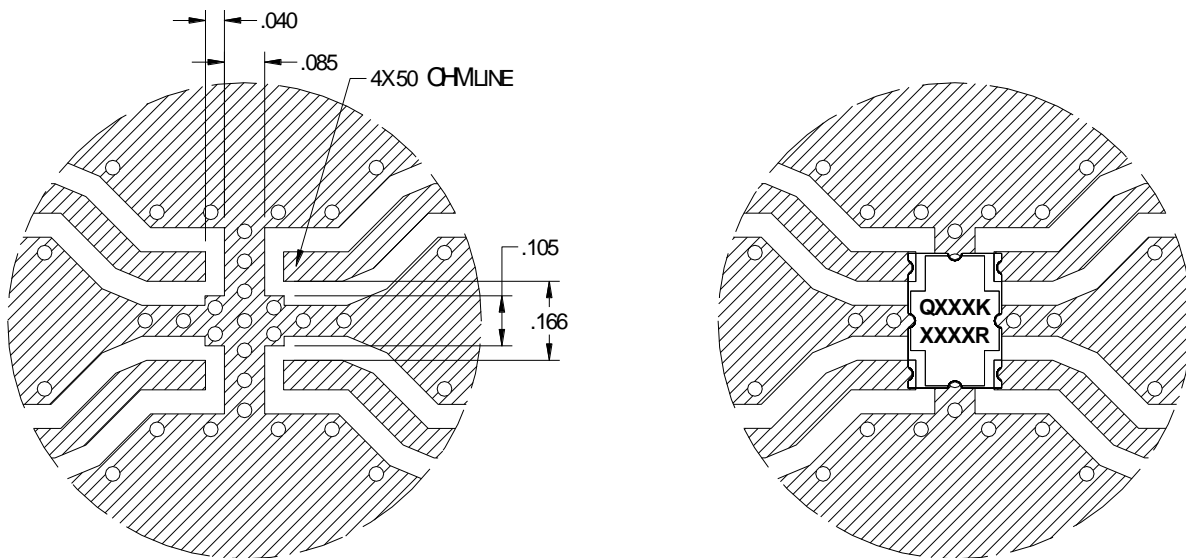
## PIN CONFIGURATION



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.



# Q20HK-1900R

SURFACE MOUNT 20dB 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 2 0 H    K    -    1 9 0 0    R**  
①    ②    ③    ④

①	②	③	④
PRODUCT CODE	SIZE	FREQUENCY	PLATING
20dB DIRECTIONAL COUPLER	A = .250 X .200 K = .283 X .197 B = .560 X .200 G = .560 X .350 D = .650 X .480	MHz  (SEE TABLE 1)	R = IMMERSION TIN  E = ENIG (Electroless nickel immersion gold)



The Q20HK-1900R is lead free, RoHS compliant product.