

SURFACE MOUNT 10dB DIRECTIONAL COUPLER

APPLICATIONS

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

FEATURES

- 800 1000 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

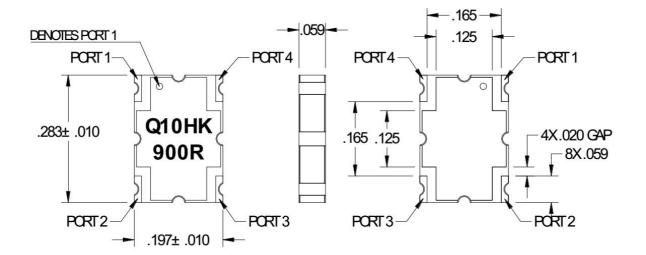
TABLE 1: TYPICAL SPECIFICATIONS*

FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)	OJC (°C/W)
800-1000	80	Q10HK-900R	0.4	10 ± 0.5	16	1.4	-55 to +95	

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

MECHANICAL OUTLINE

* Dimensions are inches.

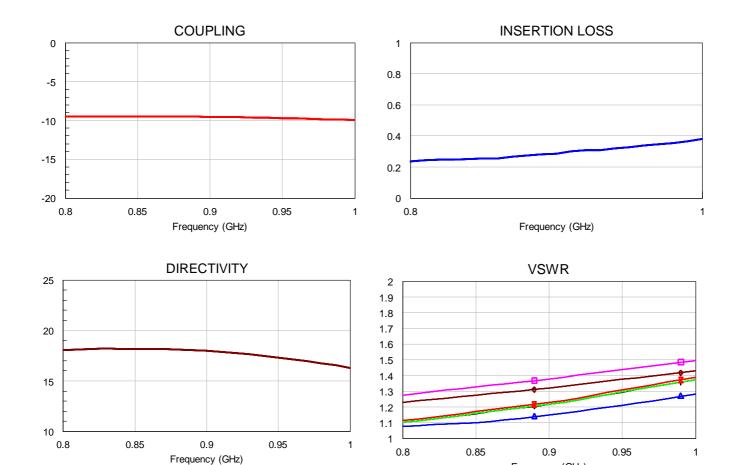


[†] Please consult sales (sales@electro-photonics.com) for custom footprints, sizes, and/or specifications.

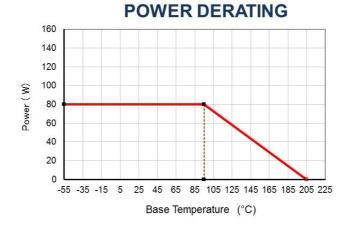
Frequency (GHz)

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TYPICAL PERFORMANCE



POWER DERATING



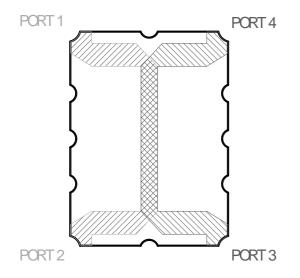
DIRECTIONAL COUPLERS



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REV 1.0.0

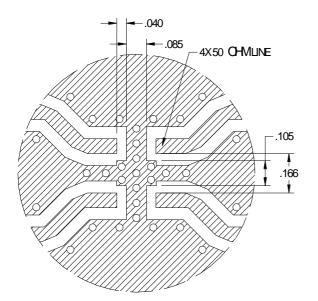
PIN CONFIGURATION

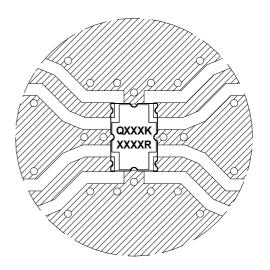


PORT 1	PORT 2	PORT 3	PORT 4
IN	DIRECT	ISOLATED	COUPLED
DIRECT	IN	COUPLED	ISOLATED
ISOLATED	COUPLED	IN	DIRECT
COUPLED	ISOLATED	DIRECT	IN

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.





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ORDERING INFO*

* Consult sales (<u>sales@electro-photonics.com</u>) for custom configuration, size, footprint, and/or specifications. Tape & Reel available upon request (with minimum order quantities).



① PRODUCT CODE	② SIZE	③ FREQUENCY	④ PLATING
10dB DIRECTIONAL COUPLER	A = .250 X .200 K = .283 X .197 B = .560 X .200	MHz (SEE TABLE 1)	R = IMMERSION TIN
	G = .560 X .350 D = .650 X .480	(SEE TABLE 1)	E = ENIG (Electroless nickel immersion gold)



The Q10HK-900R is lead free, RoHS compliant product.