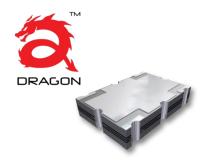
SURFACE MOUNT 15dB DIRECTIONAL COUPLER

**REV 1.0** 



#### **APPLICATIONS**

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

#### **FEATURES**

- Broadband 700 1100 MHz
- High power
- Low loss
- Flat coupling
- Compact and low profile
- Dimensionally stable materials for best CTE match
- Lead-Free

## **SPECIFICATIONS**

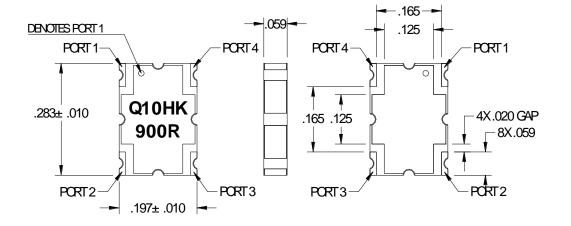
**TABLE 1: TYPICAL SPECIFICATIONS\*** 

FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)	⊝JC (°C/W)
800-1000	50	Q15HK-900R	0.30	15 ± 1.0	16	1.42	-55 to +85	28.5

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

## MECHANICAL OUTLINE

\* Dimensions are inches.



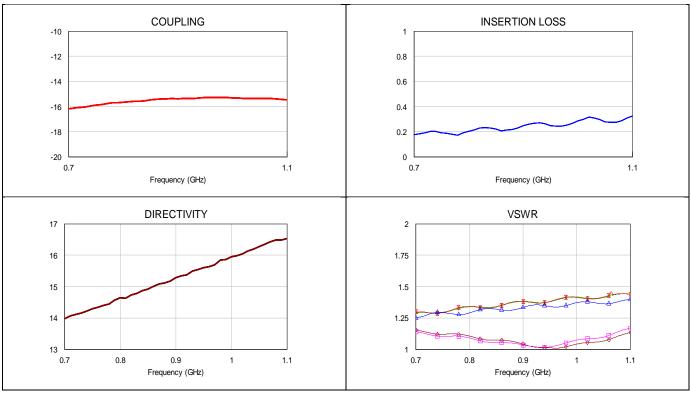
<sup>†</sup> Please consult sales (sales@electro-photonics.com) for custom footprints, sizes, and/or specifications.

**DIRECTIONAL COUPLERS** 

**REV 1.0** 

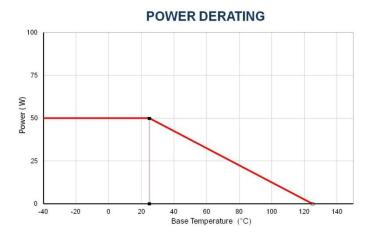
SURFACE MOUNT 15dB DIRECTIONAL COUPLER

# TYPICAL PERFORMANCE



ELECTRO - PHOTONICS

# **POWER DERATING**

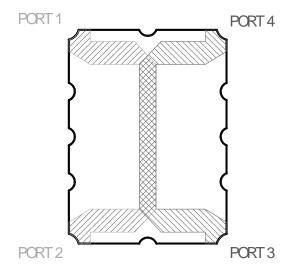


ELECTRO - PHOTONICS

SURFACE MOUNT 15dB DIRECTIONAL COUPLER

#### **REV 1.0**

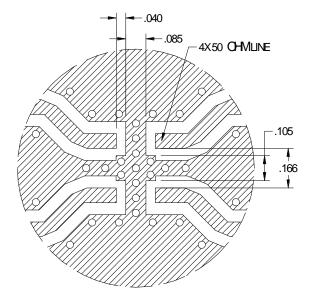
# PIN CONFIGURATION

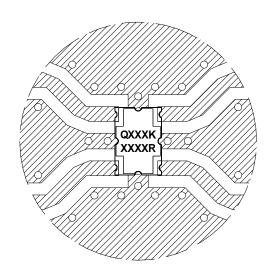


PORT 1	PORT 2	PORT 3	PORT 4
IN	DIRECT	ISOLATED	COUPLED
DIRECT	IN	COUPLED	ISOLATED
ISOLATED	COUPLED	IN	DIRECT
COUPLED	ISOLATED	DIRECT	IN

## **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.







SURFACE MOUNT 15dB DIRECTIONAL COUPLER

**REV 1.0** 

## **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). Add dash T ( - T ) at the end of the part number for tape and reel.



① PRODUCT CODE	② SIZE	③ FREQUENCY	④ PLATING
15dB 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	(OLL IABLE I)	E = ENIG (Electroless nickel immersion gold)



The Q15HK-900R-SMA is a lead free, RoHS compliant product.