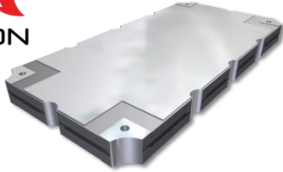


Q20HE-1090R

SURFACE MOUNT 20dB DIRECTIONAL COUPLER

REV 1.2.0



APPLICATIONS

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

FEATURES

- Broadband 960 -1220 MHz
- High power
- Very low loss
- High directivity
- Flat coupling
- Dimensionally stable materials for best CTE match
- Lead-Free

SPECIFICATIONS

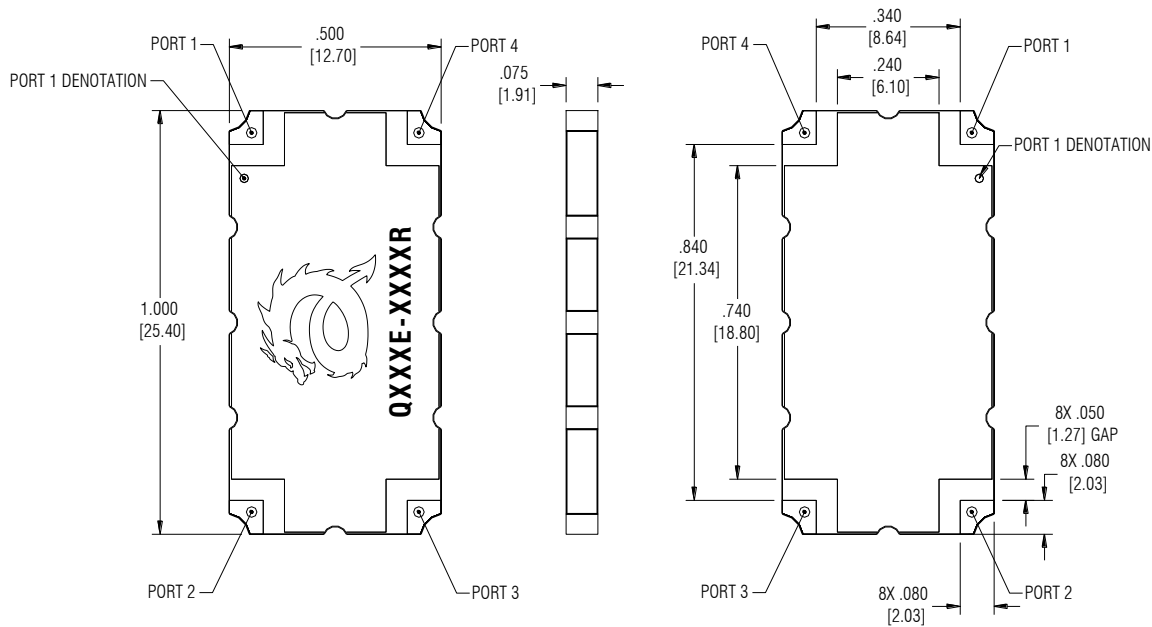
TABLE 1: TYPICAL SPECIFICATIONS*

FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	MEAN COUPLING (dB)	FREQUENCY SENSITIVITY (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)	ΘJC (°C/W)
960-1220	400	Q20HE-1090R	0.15	20 ± 1	± .5	20	1.20	-55 TO +95	6.95

* Units tested with small signal using Electro-Photonics testboard 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

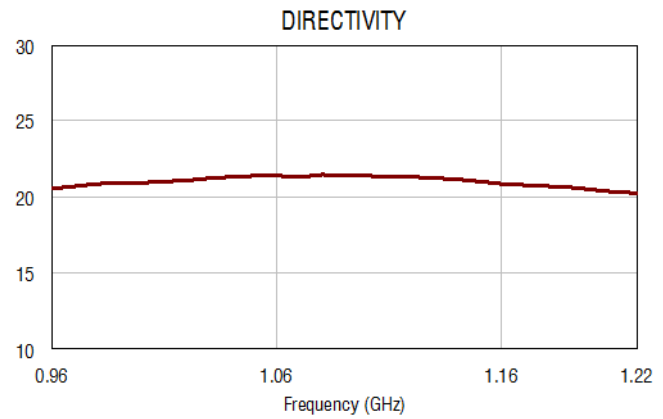
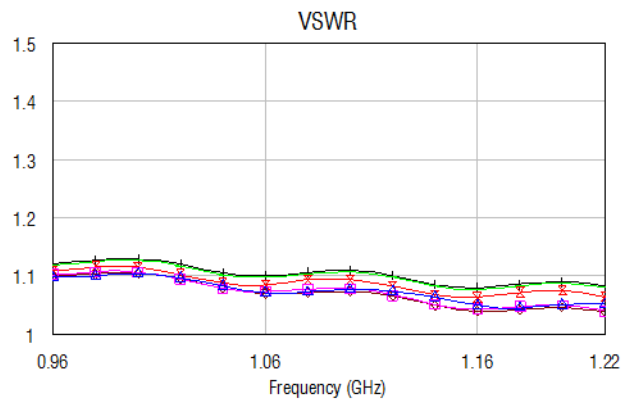
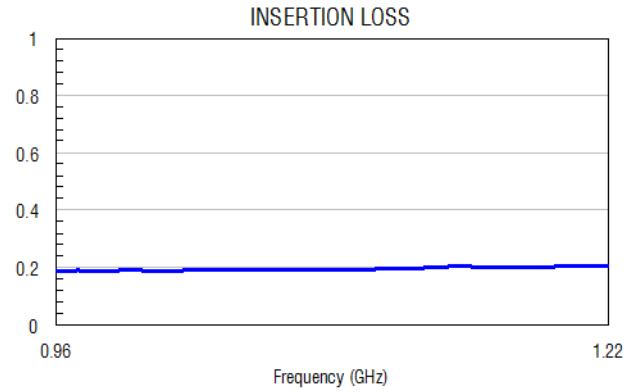
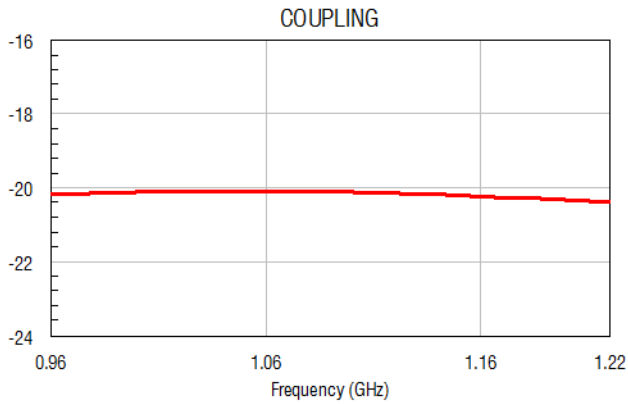


Q20HE-1090R

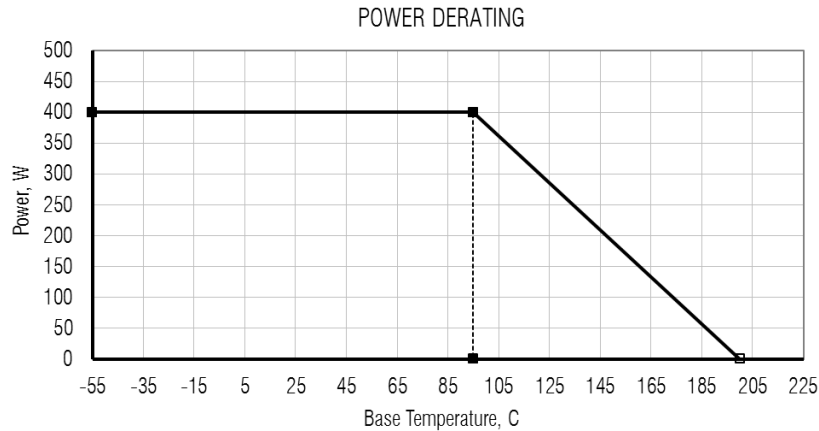
SURFACE MOUNT 20dB DIRECTIONAL COUPLER

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TYPICAL PERFORMANCE



POWER DERATING

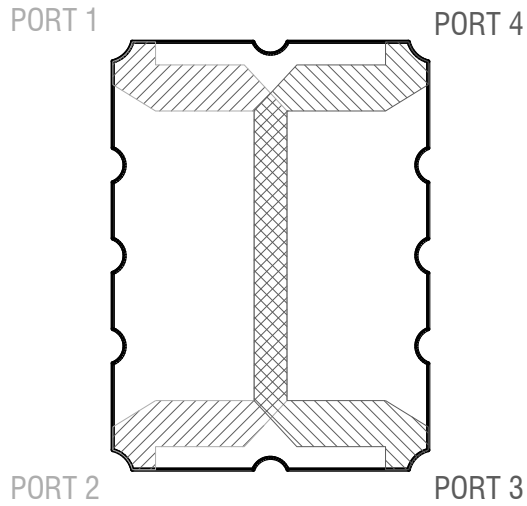


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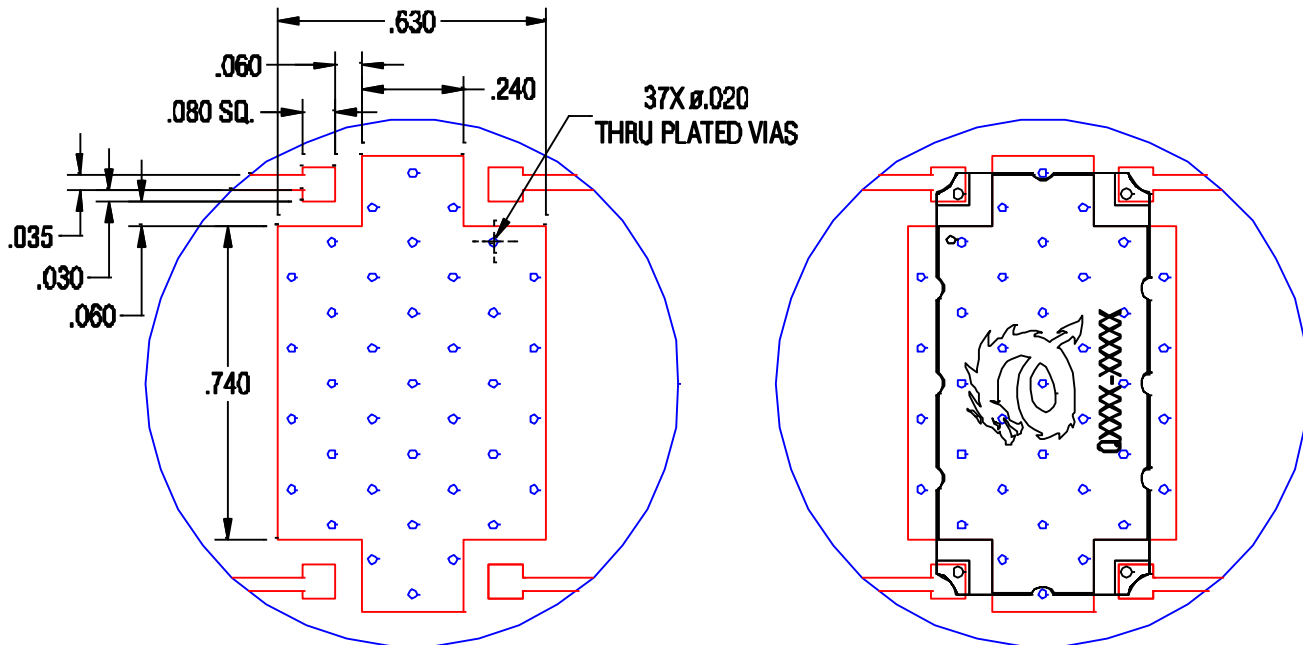
PIN CONFIGURATION



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 25 mil Taconic RF-60A material. Land pattern design must be taken into consideration when using a different thickness and/or dielectric constant in order to achieve optimal performance.



Q20HE-1090R

SURFACE MOUNT 20dB DIRECTIONAL COUPLER

REV 1.2.0

ORDERING INFO*

* Consult sales (sales@electro-photonics.com) for custom configuration, size, footprint, and/or specifications. Tape & Reel available upon request (add -T to the part number when ordering).

Q 2 0 H E - 1 0 9 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 E = 1.00 X .500	MHz (SEE TABLE 1)	R = IMMERSION TIN