

Q10HG-3850R

SURFACE MOUNT 10 dB DIRECTIONAL COUPLER

REV 1.0.0



APPLICATIONS

- Power Amplifiers
- Modulators/Demodulators
- Antenna Feeds
- Microwave Distribution Networks
- Integrated Circuits

FEATURES

- Excellent RF performance; low insertion loss, tight coupling
- Compact and low profile
- Industry standard sizes and footprint
- Optimized for thermal and RF performance
- Dimensionally stable materials for best CTE match

SPECIFICATIONS

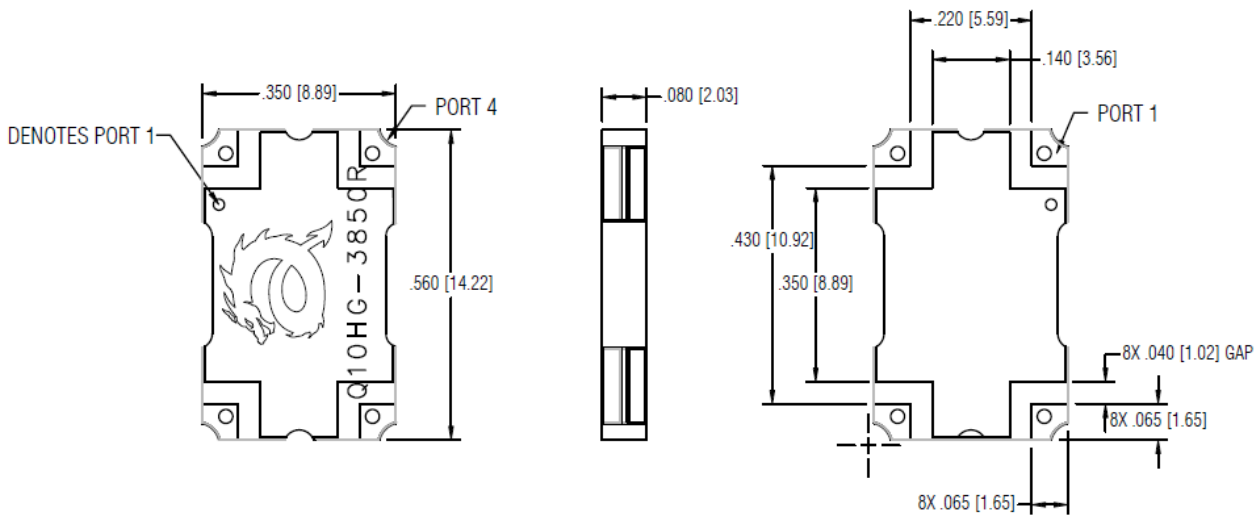
TABLE 1: TYPICAL SPECIFICATIONS*

FREQ (MHz)	POWER (W)	PART NUMBER	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	VSWR	OPERATING TEMP (°C)
2000-4000	150	Q10HG-3850R	0.1	10 ± 1.0	21	1.20	-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 [millimeters].

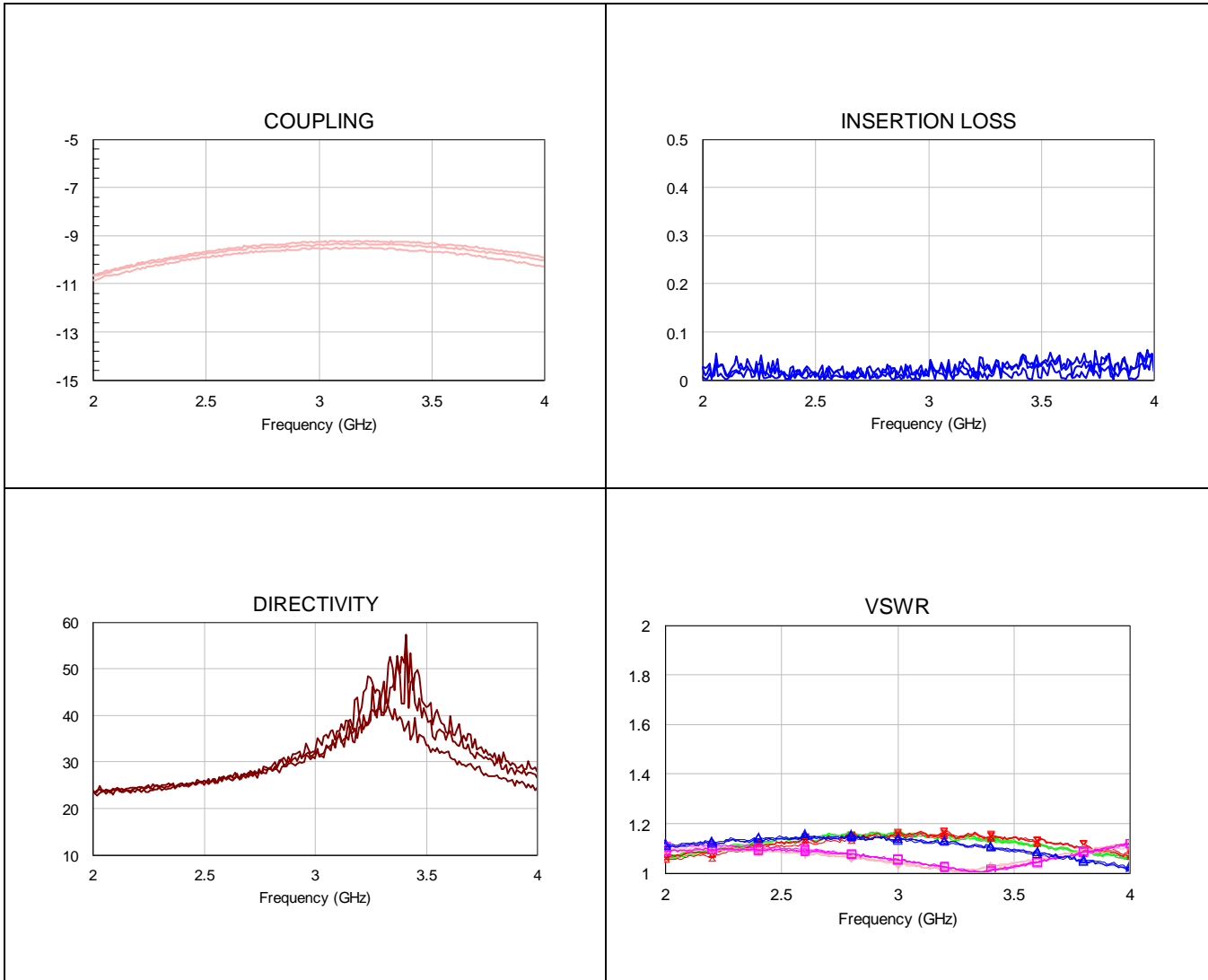


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TYPICAL PERFORMANCE



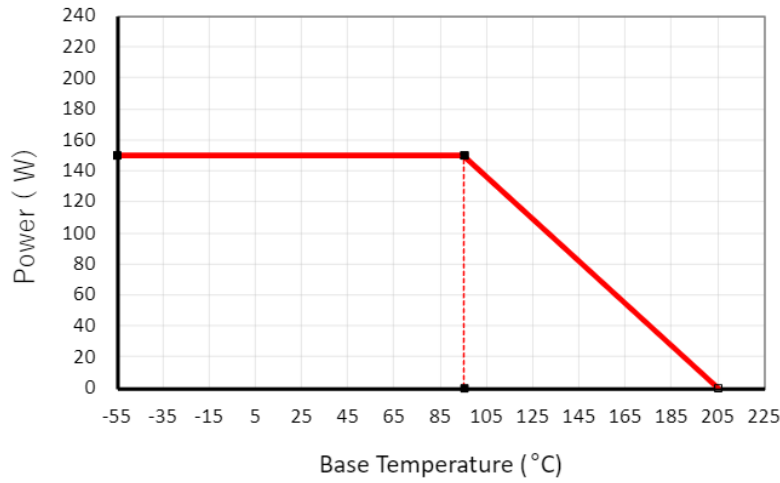
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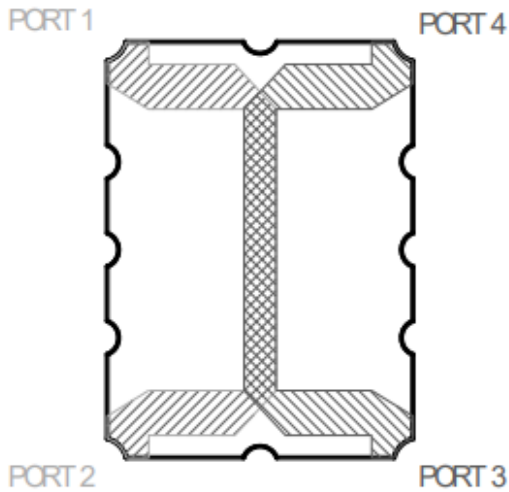
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POWER DERATING

POWER DERATING



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

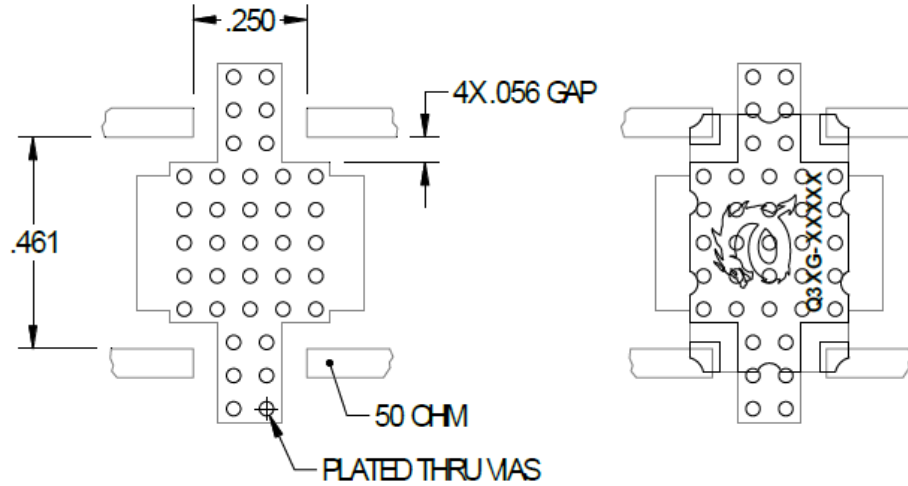
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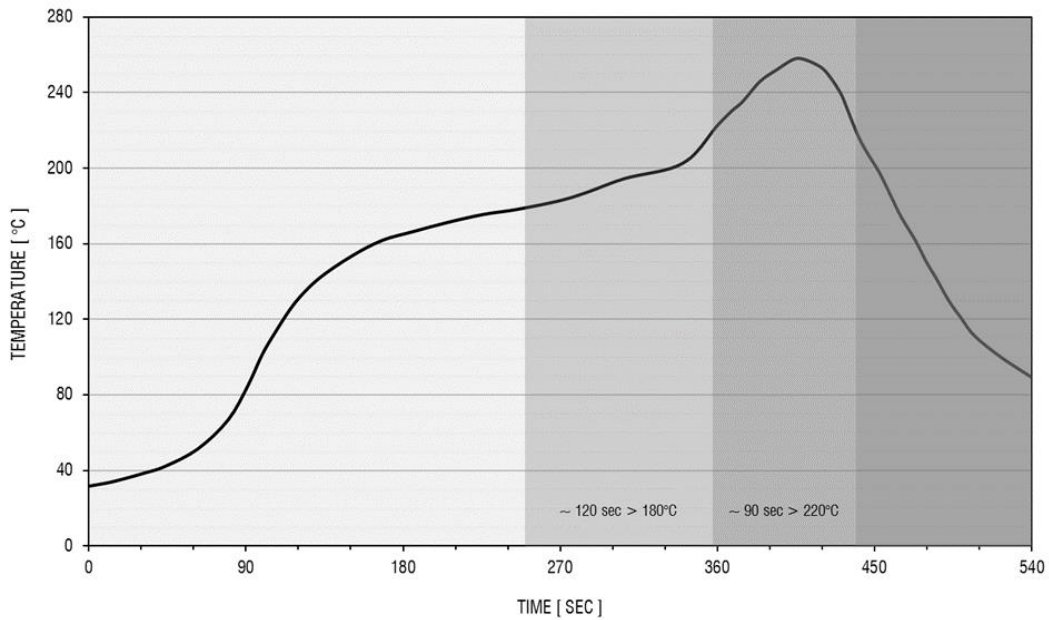
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MOUNTING FOOTPRINT

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.



LEAD-FREE SOLDER PROFILE



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ORDERING INFO

Q 1 0 H G - 3 8 5 0 R -

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③

④

⑤

①	②	③	④	⑤
PRODUCT CODE	SIZE	FREQUENCY	PLATING	
10 dB DIRECTIONAL COUPLER	A = .250 X .200 B = .560 X .200 G = .560 X .350 D = .650 X .480	MHz	R = IMMERSION TIN	T=Tape & Reel

The Q10HG-3850R is lead free, RoHS compliant product.

