

Open Carrier Frequency Doubler For Microwave Telecommunications

Rev. V1

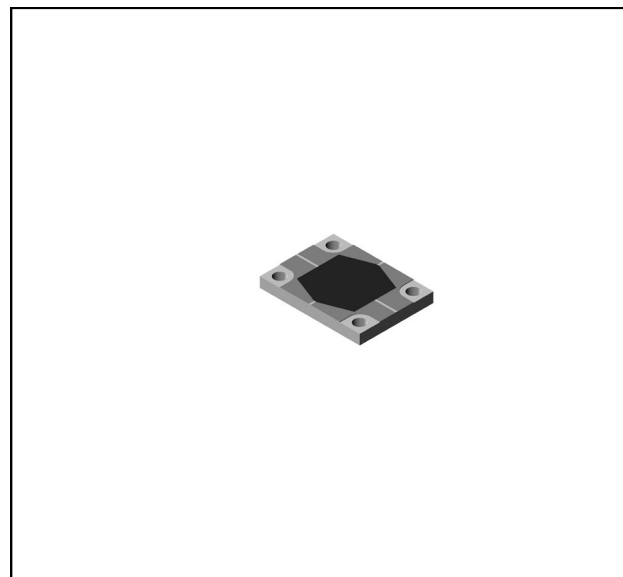
Features

- Input Frequency 1.5 to 8.0 GHz
- Output Frequency 3.0 to 16.0 GHz
- Input Drive Level +10 dBm (nominal)
- Microstrip Interface

Description

The FDC2310 is a passive bridge diode frequency doubler, designed for use in military, commercial and test equipment applications. The design utilizes Schottky bridge quad diodes and broadband soft dielectric baluns to attain excellent performance. Environmental screening available to MIL-STD-883, MIL-STD-202, or MIL-DTL-28837, consult factory.

Product Image



Ordering Information

Part Number	Package
FDC2310	Open Carrier

Electrical Specifications: $Z_0 = 50\Omega$ $P_{in} = +10$ dBm

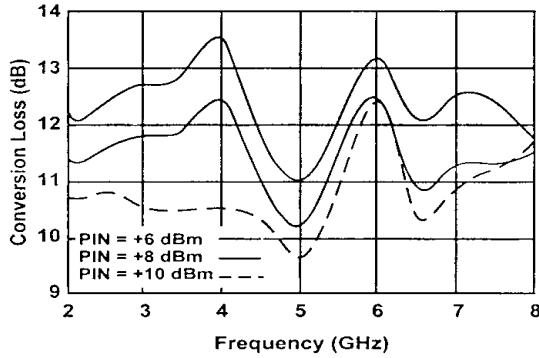
Parameter	Test Conditions	Units	Typical	Guaranteed	
				+25°C	-40° to +85°C
SSB Conversion Loss (max)	$f_{in} = 1.5$ to 8.0 GHz	dB	11	14.0	14.5
Fundamental Suppression (min)	$f_{in} = 1.5$ to 8.0 GHz	dBc	35	19.5	19
Third Harmonic Suppression (min)	$f_{in} = 1.5$ to 8.0 GHz	dBc	40	20	18
Input VSWR	$f_{in} = 1.5$ to 8.0 GHz		2.0:1		

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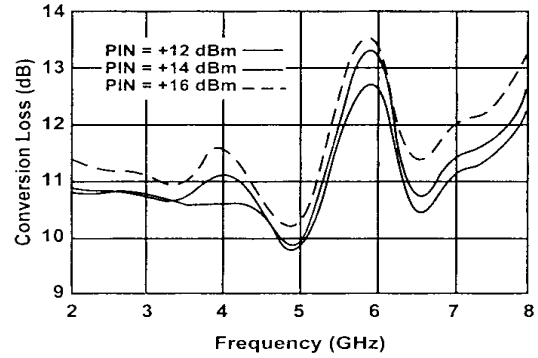
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Typical Performance Curves

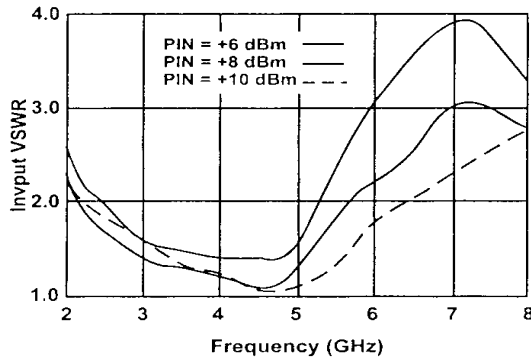
Conversion Loss



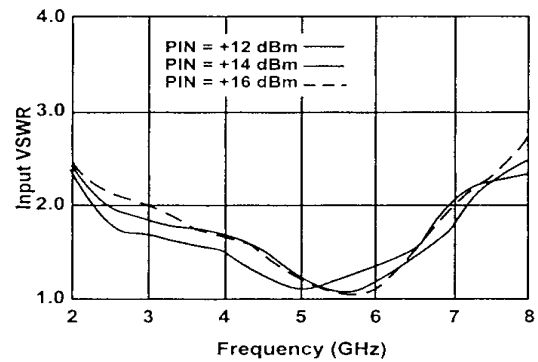
Conversion Loss



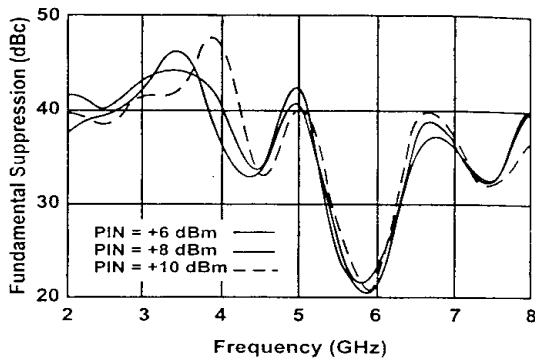
Input VSWR



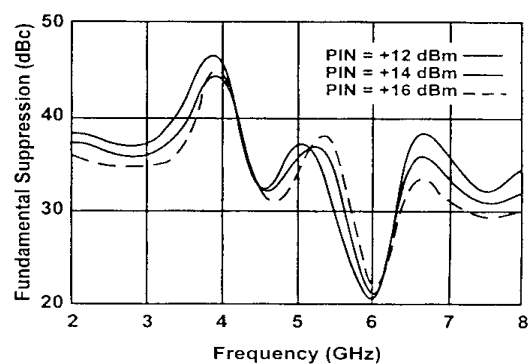
Input VSWR



Fundamental Suppression



Fundamental Suppression



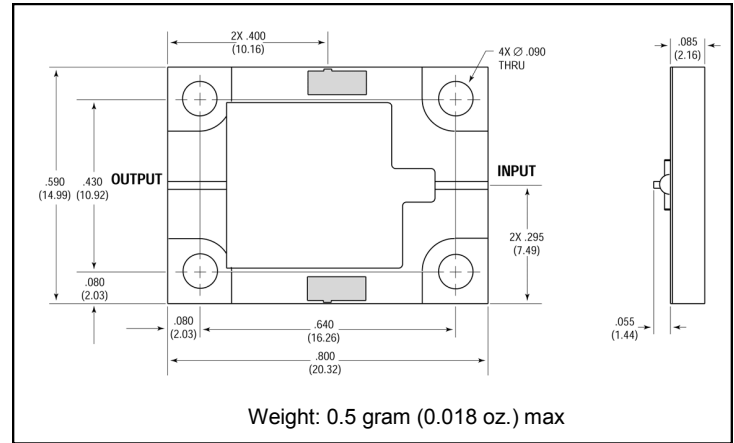
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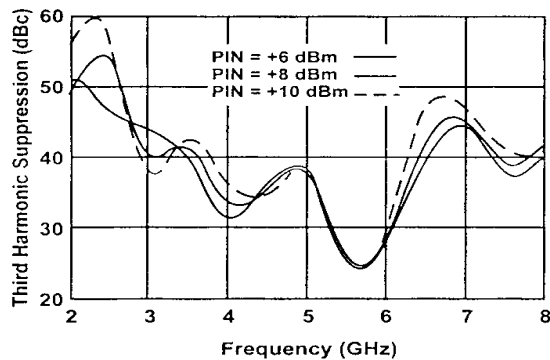
Absolute Maximum Ratings

Parameter	Absolute Maximum
Operating Temperature	-54°C to +100°C
Storage Temperature	-65°C to +100°C
Peak Input Power	+23 dBm max @ +25°C +20 dBm max @ +100°C
Peak Input Current	50 mA DC

Outline Drawing: Open Carrier *

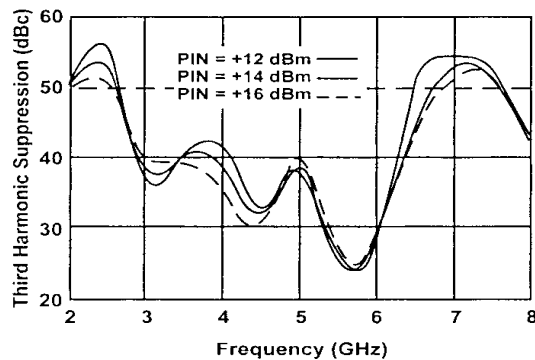


Third Harmonic Suppression



* Dimensions are inches (millimeters) ± 0.015 (0.38) unless otherwise specified.

Third Harmonic Suppression



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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.