

50Ω Multiply-BY-2 Active Multiplier, Output 25-31 GHz

Case PN: 6UDD2W605A2

Features:

- Multiply by M: (M = 2)
- Input frequency range: 12.5G-15.5 GHz
- Low Input Power Drive: 0 to +6 dBm
- High Output Power: 21 dBm
- Fo Isolation: >45 dBc
- Single Supply: +4.5V @ 214 mA
- Rugged, shielded case (Input: SMA Connector, Output: 2.92mm Connector)

Applications:

- Synthesizers, Local Oscillators, Fiber Optic
- Clock Generation Applications: SONET OC-192 & SDH STM-64
- Cellular, Satellite Communication Systems
- ISM, LTE
- SDR & Ham Radio

**General Description**

FM2X25G31G is a x2 active broadband frequency multiplier GaAs pHEMT SMT package. It has low input power drive requirement (0 to +6 dBm). When driven by +4 dBm signal, the multiplier provide a +17 dBm typical output power from 25 to 31GHz. It integrates 2 Amplifiers (one before Multiplier and one after Multiplier). The FM2X25G31G is ideal for use in LO multiplier chains for Point-to-Point & VSAT Radios and yielding reduced parts counts vs. traditional approaches. The input connector is SMA Steel Connector and Output connector is 2.92mm Steel Connector.

Electrical Specifications (Vcc = 4.5V, T_A = +25°C, +4 dBm Drive Level)

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range, Input	12.5 – 15.0			15.0 – 15.5			GHz
Frequency Range, Output	25 – 30			30 – 31			GHz
Output Power Range	17	21		14	18		dBm
Fo Isolation (with respect to output level)		55			55		dBc
Input Return Loss	4	12		4	9		dB
Output Return Loss	8	12		5	10		dB
Supply Current (Icc)		214	240		214	240	mA

- **Mounting FM2X25G31G to a Heatsink or Metal Plate is strongly recommended for proper heat dissipation**



Absolute Maximum Ratings

Item	Parameter	Rating	UNITS
1	RF Input Power, 25 °C	+10	dBm
2	Vcc	+5.5	V
3	Storage Temperature	-65 to +150	°C
4	Operating Temperature	-40 to +85	°C

Outline Drawing (inch)

