

FDG-4A-1600 – FREQUENCY DOUBLER

TECHNICAL FEATURE

FEATURES

- 25 to 3000 MHz
- Minimum Spurious Output
- Miniature SMD Package

PRINCIPAL SPECIFICATIONS

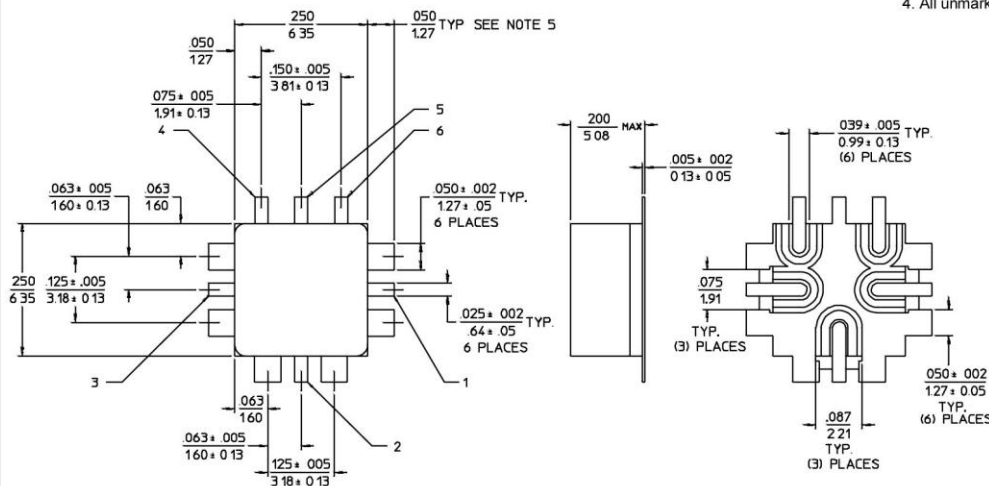
Model Number	Input Frequency, MHz	Input Frequency Operating, MHz	†Conversion Loss, dB,		*Typical Harmonic Output,		RF Input Power, Nom.	Weight, oz (g), Nom.
			Typ.	Max.	F1 dB	F3 dB		
FDG-4A-1600	25 - 3000	25 - 600	12	14	-27	-30	+13 dBm	0.09 (2.5)
		600 - 2500	12	13	-18	-30		
		2500 - 3000	13	15.5	-15	-20		

All specifications at nominal Input Power of +13 dBm

*Typical Harmonic Level is referenced to Second Harmonic Output Power, F₂

Outline A-package

- NOTES: 1. Tolerance on 3 place decimals ±0.10(.25) except as noted.
 2. Dimensions in inches over millimeters.
 3. Dimensions marked with * apply only at body.
 4. All unmarked pins are case ground.



PIN NO.	FUNCTION
1	INPUT
2	GROUND
3	OUTPUT
4	GROUND
5	GROUND
6	GROUND

General Notes:

1. The FDG-4A-1600 covers the frequency range of 25 to 3000 MHz using lumped element technology for broad bandwidths and excellent rejection of fundamental and third harmonic energy.
2. Merrimac frequency doublers comply with the applicable sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

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GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
Usable Input Range:	+7 to 16 dBm
Input VSWR:	25 - 500 MHz: 1.3:1 typ. 500 - 3000 MHz: 1.8:1 typ
Operating Temperature:	- 55° to +85°C