5 to 3000 M Hz/M in imum Spurious Output /Flatpack or TO-5 or SM A Connectors



PRINCIPAL SPECIFICATIONS									
Model Number	Input Freq., MHz	Operating Input Frequency, MHz		version s, dB, Max.	*Typical I F <sub>1</sub> dB	Harmon F <sub>3</sub> dB	ic Output F <sub>4</sub> dB	RF Input Range (Nom.)	Package Style
FDF-4C-750	75 - 1500	75 - 300 300 - 700 700 - 1500	11 11 11	14 14 14	- 50 - 40 - 35	- 50 - 45 - 40		+7 to 16 (13 dBm)	Flat
FDF-500A	5 - 500	5 - 100 100 - 300 300 - 500	12 12 15	16 15 17	- 40 - 30 - 30	- 45 - 40 - 40	- 25 - 27 - 30	+5 to 18 (13 dBm)	Flat
FDF-4A-1500	25 - 3000	25 - 600 600 - 2500 2500 - 3000	12 12 13	14 13 15.5	-27 -18 -15	-30 -30 -20		+7 to 16 (13 dBm)	Flat
FDM-500A	5 - 500	5 - 100 100 - 300 300 - 500	12 12 15	16 15 17	- 40 - 35 - 30	- 45 - 40 - 40	- 25 - 27 - 30	+5 to 18 (13 dBm)	SMA
FDT-500A	5 - 500	5 - 100 100 - 300 300 - 500	10 10 11	13 13 15	- 40 - 35 - 30	- 45 - 40 - 40	- 25 - 27 - 30	+2 to 13 (9 dBm)	TO-5
<sup>†</sup> Conversion Loss measured at nominal Input Power *Typical Harmonic Level is referenced to RF Input Power  All specifications measured at nominal input power and referenced to input power.									

**Typical FDM-500A Performance** B NI SSO **NSERTION** 14 13 12 INPUT FREQ. REJECTION 40 30 50 40 1.0 1000 10 100 FREQUENCY IN MHz

## **GENERAL SPECIFICATIONS**

Impedance:  $50 \Omega$  nom.

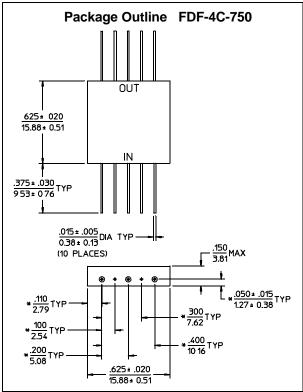
Weight, FDM-500A 0.65 oz. (2.5 g)Weight, All others: 0.09 oz. (18 g)Operating Temperature:  $-55^{\circ}$  to  $+85^{\circ}$ C

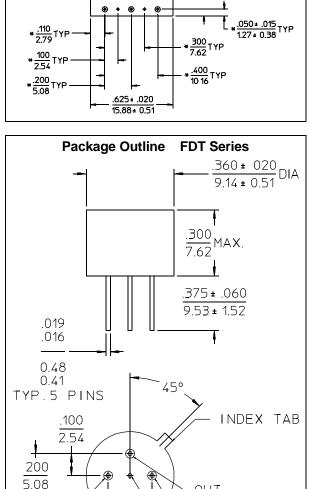
## **General Notes:**

- 1. Merrimac Frequency Doublers cover the frequency range of 5 to 3000 MHz using lumped element circuits for broad bandwidth and excellent rejection of fundamental and third harmonic energy. These units may also act as quadruplers with additional conversion loss.
- 2. Merrimac Frequency Doublers comply with the relevant sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space specifications requiring the highest reliability.

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5 to 3000 MHz/Minimum Spurious Output/Flatpack or TO-5 or SMA Connectors





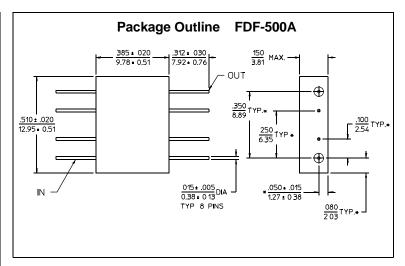
**GND** 

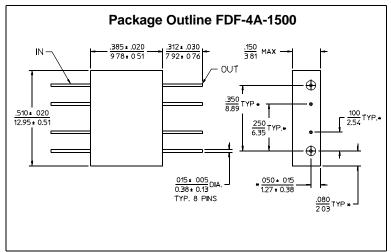
.100

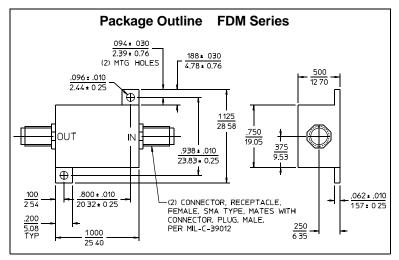
2.54

200

5.08







## NOTES:

- 1. Tolerance on 3 place decimals  $\pm .010(.25)$  except as noted.
- 2. Dimensions in inches over millimeters.
- 3. Dimensions marked with \* apply only at body.
- 4. All unmarked pins are case ground.

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(COLOR BEAD)

GROUND PIN

-GND

IN