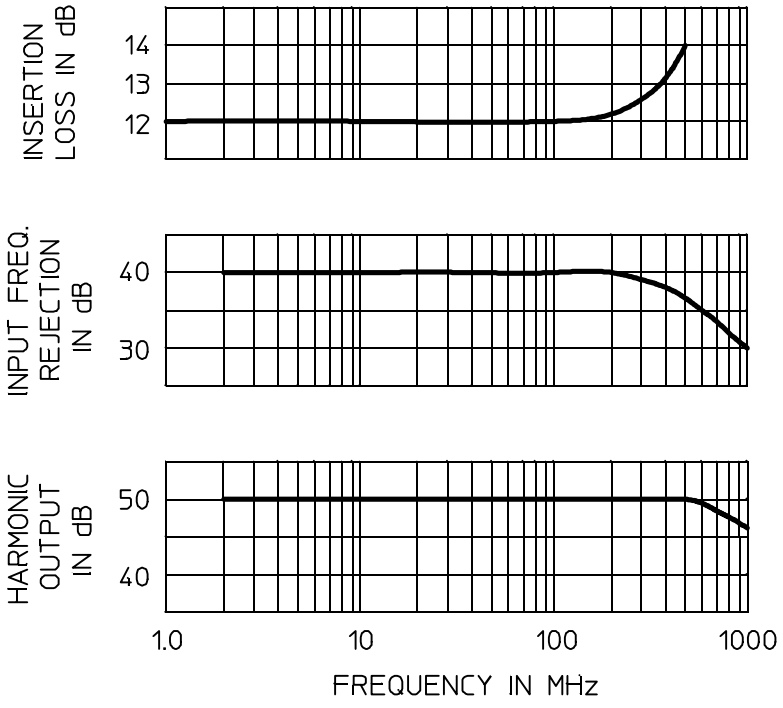
PRINCIPAL SPECIFICATIONS

Model Number	Input Freq., MHz	Operating Input Frequency, MHz	†Conversion Loss, dB, Typ.	Max.	*Typical Harmonic Output F_1 dB	F_3 dB	F_4 dB	RF Input Range (Nom.)	Package Style
FDF-4C-750	75 - 1500	75 - 300	11	14	– 50	– 50		+7 to 16	Flat
		300 - 700	11	14	– 40	– 45		(13 dBm)	
		700 - 1500	11	14	– 35	– 40			
FDF-500A	5 - 500	5 - 100	12	16	– 40	– 45	– 25	+5 to 18	Flat
		100 - 300	12	15	– 30	– 40	– 27	(13 dBm)	
		300 - 500	15	17	– 30	– 40	– 30		
FDF-4A-1500	25 - 3000	25 - 600	12	14	–27	–30		+7 to 16	Flat
		600 - 2500	12	13	–18	–30		(13 dBm)	
		2500 - 3000	13	15.5	–15	–20			
FDM-500A	5 - 500	5 - 100	12	16	– 40	– 45	– 25	+5 to 18	SMA
		100 - 300	12	15	– 35	– 40	– 27	(13 dBm)	
		300 - 500	15	17	– 30	– 40	– 30		
FDT-500A	5 - 500	5 - 100	10	13	– 40	– 45	– 25	+2 to 13	TO-5
		100 - 300	10	13	– 35	– 40	– 27	(9 dBm)	
		300 - 500	11	15	– 30	– 40	– 30		

†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



GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
Weight, FDM-500A	0.65 oz. (2.5 g)
Weight, All others:	0.09 oz. (18 g)
Operating Temperature:	– 55° to +85°C

General Notes:

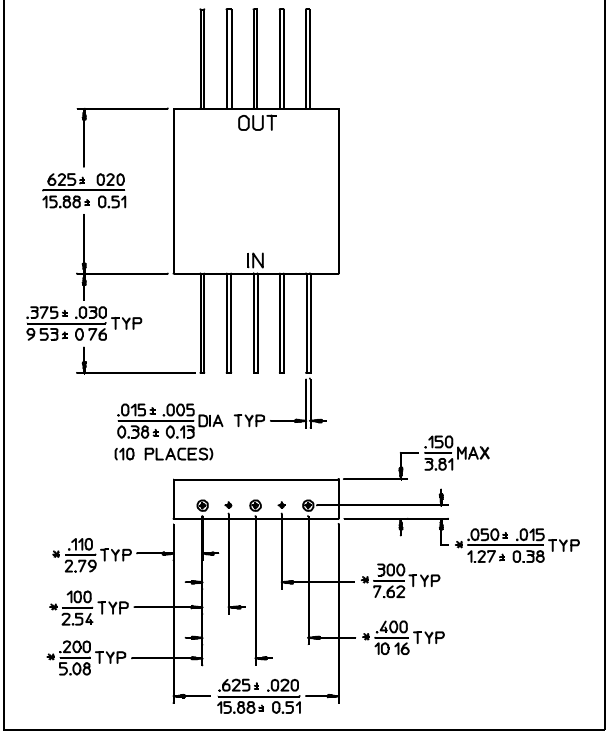
1. Merrimac Frequency Doublers cover the frequency range of 5 to 3000 MHz using lumped element circuits for broad bandwidth and excellent rejection of fundamental and third harmonic energy. These units may also act as quadruplers with additional conversion loss.

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.

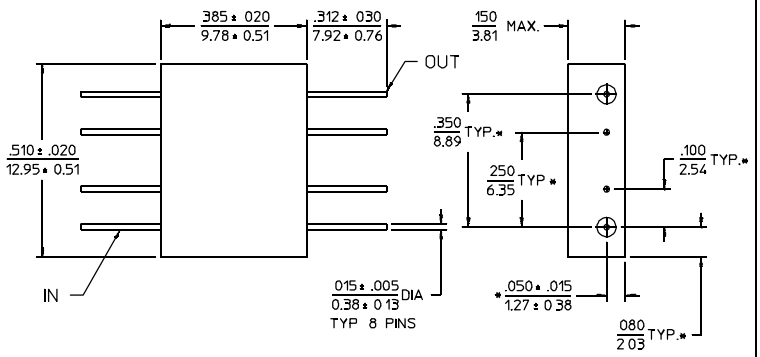
23Feb96

For further information contact: *MERRIMAC / 41 Fairfield Pl, West Caldwell, NJ, 07006 / 973-575-1300 / FAX 973-575-0531*

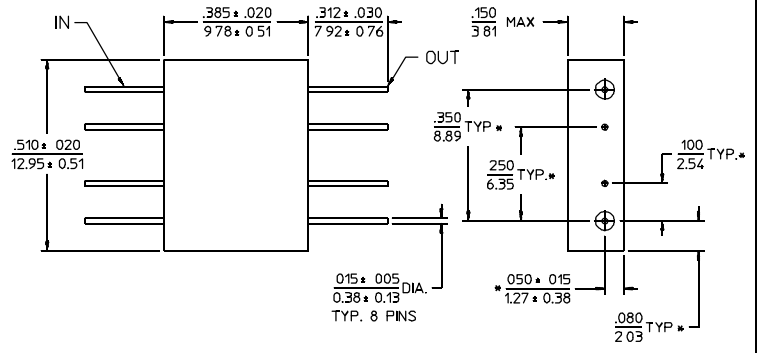
Package Outline FDF-4C-750



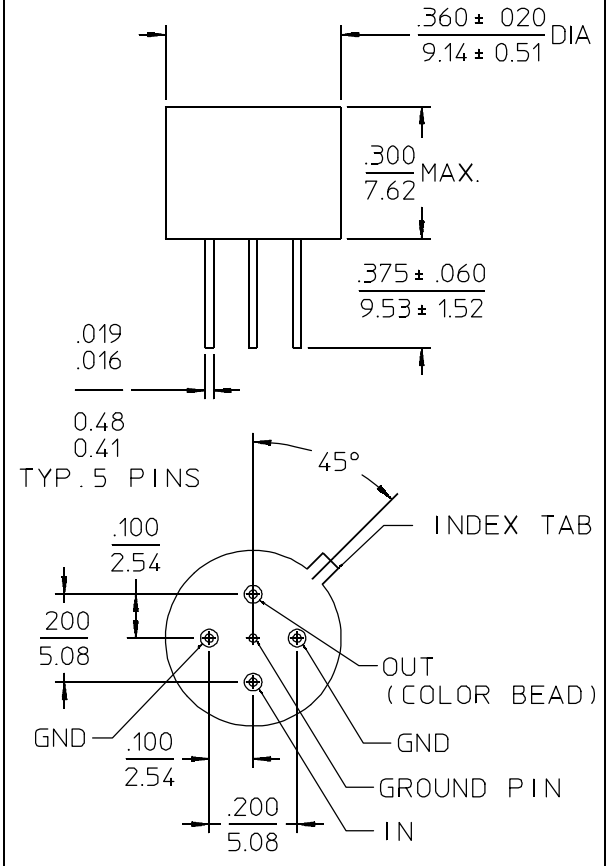
Package Outline FDF-500A



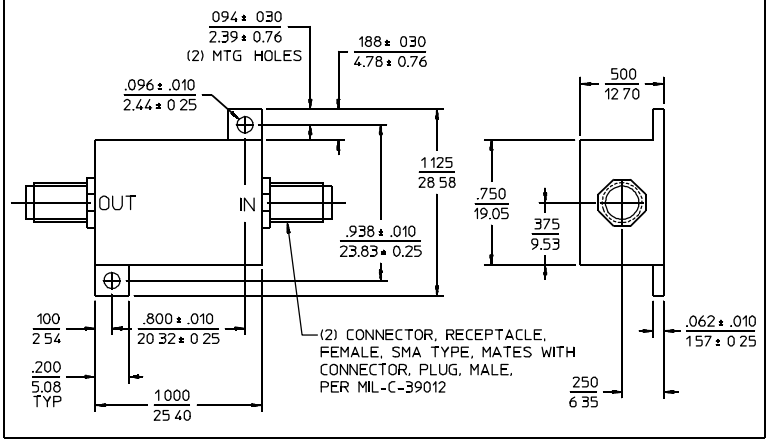
Package Outline FDF-4A-1500



Package Outline FDT Series



Package Outline FDM Series



NOTES:

1. Tolerance on 3 place decimals ±.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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