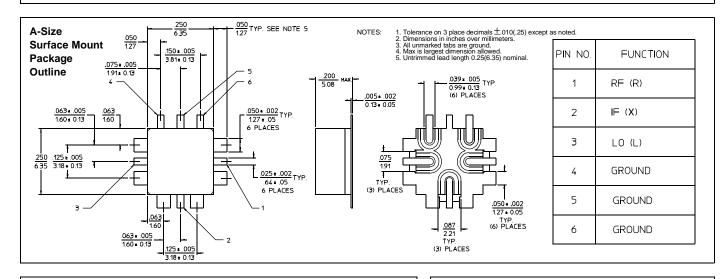
## **DMG-A Series**

# DOUBLE BALANCED MIXERS

#### 10 to 1500 MHz / + 7 to + 17 dBmLO / SMD Package

PRINCIPAL SPECIFICATIONS										
Model Number	RF/LO Frequency, MHz	IF Frequency, MHz	LO Drive, dBm, Nom.	Conve Loss Max.			olatio L-X dB	n, Typ. R-X dB	-1 dB Compr. Point	Input Intercept Point
DMG-2A-750	10 - 1500	DC - 1000	+7	10	7	35	20	15	0 dBm (typ.)	+12 dBm (typ.)
DMG-4A-750	10 - 1500	DC - 1000	+13	10	8	35	20	15	+8 dBm (typ.)	+19 dBm (typ.)

All specifications are as measured in a  $50\Omega$  system, at nominal LO power, in a down converter application.



#### **General Notes:**

1. The DMG-A series of surface mount Double Balanced Mixers covers the frequency range of 10 to 1500 MHz using miniature 4-diode rings suitable for both general purpose and high performance applications. 2. The DMG-A SMD package is designed for 50  $\Omega$  coplanar systems

to insure satisfactory RF performance. The Kovar leads are supplied untrimmed (unless otherwise specified) to allow mounting the package in a variety of configurations.

3. Merrimac offers a broad selection of Double Balanced Mixers ideal for a variety of signal processing functions from 20 kHz to 20 GHz.

4. Merrimac mixers comply with MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

### **GENERAL SPECIFICATIONS**

Impedance: Noise Figure:	50 $\Omega$ nom. Within ±1 dB of					
0	Within ±1 dB of Conversion Loss					
Maximum Input Power: 300 mW @ 25°C (derate linearly to 0 mW @ 125°C)						
Usable LO Drive:	-					
DMG-2A-750:	+7 to +10 dBm					
DMG-4A-750	+10 to +17 dBm					
Polarity Sense:	Positive					
DC Offset Voltage:	3 mV typ.					
Weight, nominal:	0.02 oz (0.5 g)					
Operating Temperature: – 55° to +85°C						

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