# DOUBLE BALANCED MIXER

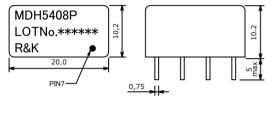


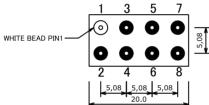
## **R&K-MDH540**



#### **OUTLINE DRAWING**

**XIN MILLIMETERS** 





Frequency : DC-3000MHz

 ■ High LO Drive Level
■ Low Cost / 8PIN Package
■ RoHS Compliance : +17dBm

#### **SPECIFICATIONS**

Frequency Range [LO&RF] : 0.1-3000MHz

: DC-1000MHz

Conversion Loss (LO Drive Level +17dBm)

	•		
	0.1 - 100MHz	100 - 1000MHz	1000 - 3000MHz
Тур.	6.0dB	5.5dB	9.0dB
Max.	8.5dB	7.5dB	11.0dB

#### Isolation (min.)

	0.1 - 100MHz	100 - 1000MHz	1000 - 2000MHz
LO - RF	15dB	25dB	20dB
LO - IF	20dB	25dB	15dB
RF - IF	20dB	20dB	10dB

Input IP3 @Center Band : +20dBm (typ.) Input 1dB Comp. Point : + 9dBm (typ.)

Impedance (All Ports) : 50 Ω Maximum RF Input Powe 200mW Maximum Peak IF Current : 100mA

**Operating Temperature** :  $-40^{\circ}$ C to + 85°C Storage Temperature : -40°C to +100°C

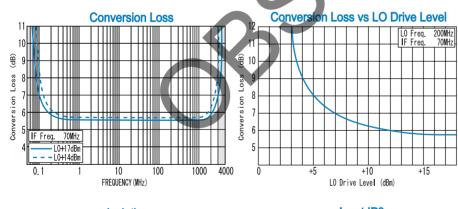
### HOW TO ORDER

Model Name

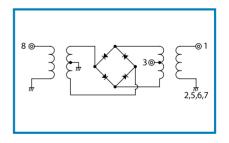
R&K-MDH5408P

8P=8PIN Package

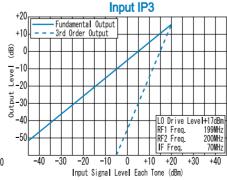
### TYPICAL PERFORMANCE (Temp @+25°C)



#### **SCHEMATIC**



Isolation					
80		+20			
70 <b>                                     </b>	<del>                                      </del>	+10 L0 - IFH +10			
60	<u> </u>	∬-·—RF-IFI ⊕ 0			
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~ 50 HILL	<del>                                      </del>	-10 -20			
.5 40 <b>111 111 1</b>	<del>                                     </del>	<u>°</u> -20			
5 40 t 40 x 5 40					
<u>8</u> 30		#-30			
20	<del>                                      </del>	<del>                                     </del>			
10		-50			
LO Drive Level+17dBm	<del>1</del>				
0.1 1	10 100	1000 4000			
FREQUENCY (MHz)					



Function	Pin No.
RF	1
IF	3
LO	8
GND	2,5,6,7
NO CONNECTION	4

R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot export products to any country for use in military or defense applications.

## **R&K Company Limited**

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