# DOUBLE BALANCED MIXER

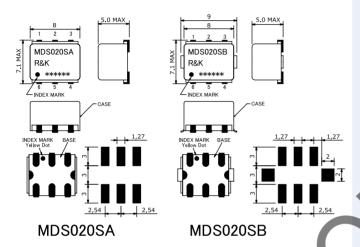


## **R&K-MDS020**



## **OUTLINE DRAWING**

**XIN MILLIMETERS** 



: DC-800MHz Frequency

■ S-High LO Drive Level : +20dBm ■ Small & Low Cost / Surface Mount

■ RoHS Compliance

### **SPECIFICATIONS**

Frequency Range [LO&RF] : 1-800MHz : DC-500MHz

(LO Drive Level +20dBm) **Conversion Loss** 

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- 10MHz	10 - 200MHz	200 - 800MHz
6.5dB	6.0dB	6.5dB

## Тур. Isolation (min.)

	1 - 10MHz	10 - 200MHz	200 - 800MHz
LO - RF	45dB	25dB	20dB
LO - IF	40dB	30dB	15dB
RF - IF	30dB	20dB	10dB

Input IP3 @Center Band : +26dBm (typ.) Input 1dB Comp. Point +16dBm (typ.)

Impedance (All Ports) : 50 Ω Maximum RF Input Power : 500mW Maximum Peak IF Current : 50mA

**Operating Temperature**  $-40^{\circ}$ C to  $+85^{\circ}$ C -40°C to +100°C Storage Temperature Max. Reflow Soldering Temp. : 260°C,10sec. Reflow Soldering Repeatability : 3 times Weight (Standard) : 0.47g (typ.)

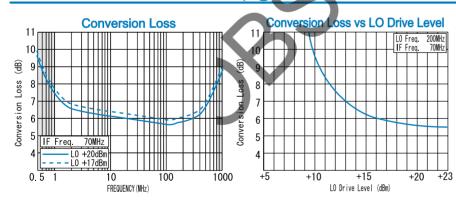
### HOW TO ORDER

Model Name R&K-MDS020SA-BLK

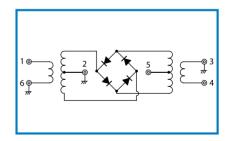
BLK=Antistatic bag TR1=Tape & Reel Package

SA=Case Type of <u>SA</u> SB=Case Type of SB

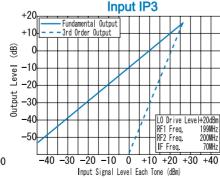
## TYPICAL PERFORMANCE (Temp @ +25°C)



#### **SCHEMATIC**



Isolation				
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60	<u> </u>	PF - IF		
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<u>:</u> 40 <del>            -     -                   </del>	<del>                                      </del>	<del>                                     </del>		
80 (dB) (dB) (dB) (dB) (dB) (dB) (dB) (dB)				
<u> </u>		-		
20	<del>                                     </del>	<del>                   </del>		
10				
	I+20dBm			
0.5 1	10	100 1000		
	FREQUENCY (MHz)			



Function	Pin No.
LO	1
RF	4
ΙF	5
GND	2,3,6

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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