# DOUBLE BALANCED MIXER

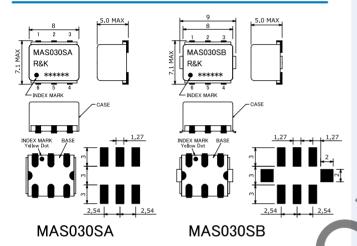


# R&K-MAS030



# **OUTLINE DRAWING**

**XIN MILLIMETERS** 



:DC-1000MHz Frequency

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

■ RoHS Compliance

### **SPECIFICATIONS**

Frequency Range [LO&RF] : 0.1-1000MHz

: DC-1000MHz

Conversion Loss (LO Drive Level +20dBm)

	0.1 - 2MHz	2 - 500MHz	500 - 1000MHz
Тур.	6.5dB	6.0dB	7.0dB
Max.	9.0dB	8.0dB	9.0dB

#### Isolation (min.)

	0.1 - 2MHz	2 - 500MHz	500 - 1000MHz
LO - RF	50dB	30dB	20dB
LO - IF	45dB	20dB	15dB
RF - IF	25dB	15dB	10dB

Input IP3 @Center Band : +27dBm (typ.) Input 1dB Comp. Point : +16dBm (typ.)

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

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

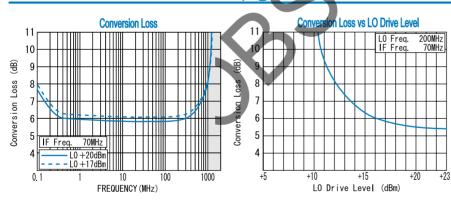
# HOW TO ORDER

Model Name R&K-MAS030SA-BLK

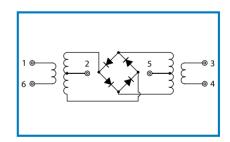
BLK=Antistatic bag TR1=Tape & Reel Package

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

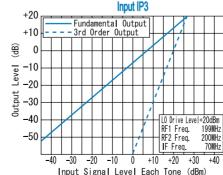
# TYPICAL PERFORMANCE (Temp @ 25°C)



### **SCHEMATIC**



Isolation					
100	L0 - RF				
90	LO-IF				
80	PF - IF				
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<u> </u>					
ē 50					
± 50 111111 11111 1111					
00 00 1 1 50 00 00 1 1 50 00 00 00 00 00 00 00 00 00 00 00 00	41111				
- 30	<del>    [                                  </del>				
20	<del>'                                      </del>				
10	1 [ [ ] ]				
LO DI IVE LEVETTZOUDIII					
0.1 1 10 100	1000				
FREQUENCY (MHz)					



Function	Pin No.	Function	Pin No.
LO+	1	LO-	6
RF+	4	RF-	3
I F+	2	I F-	5

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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