# DOUBLE BALANCED MIXER

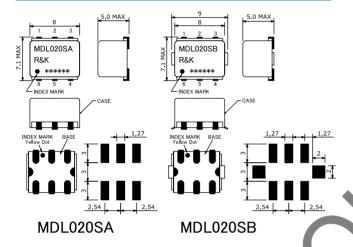


### R&K-MDL020



#### **OUTLINE DRAWING**

**※IN MILLIMETERS** 



■ Frequency :DC-800MHz

■ Low LO Drive Level : +7dBm

■ Small & Low Cost / Surface Mount

■ RoHS Compliance

#### **SPECIFICATIONS**

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

IF] : DC-500MHz

Conversion Loss (LO Drive Level +7dBm)

	, , ,		,	
	1 - 10MHz	10 - 200MHz	200 - 800MHz	
Тур.	6.5dB	6.0dB	6.5dB	
Max.	9.0dB	8.0dB	8.5dB	

#### Isolation (min.)

	1 - 10MHz	10 - 200MHz	200 - 800MHz
LO - RF	50dB	25dB	20dB
LO - IF	45dB	25dB	15dB
RF - IF	35dB	20dB	10dB

Input IP3 @Center Band : +18dBm (typ.)
Input 1dB Comp. Point : + 2dBm (typ.)

Operating Temperature : -40°C to + 85°C Storage Temperature : -40°C to +100°C Max.Reflow Soldering Temp. : 260°C,10sec. Reflow Soldering Repeatability : 3 times : 0.47g (typ.)

**SCHEMATIC** 

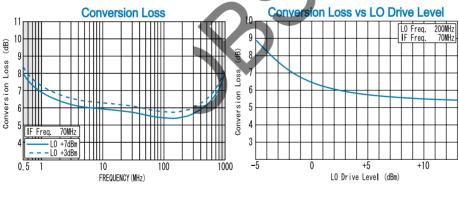
#### HOW TO ORDER

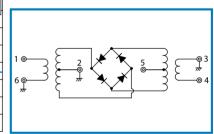
Model Name R&K-MDL020SA-BLK

BLK=Antistatic bag
TR1=Tape & Reel Package

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

#### TYPICAL PERFORMANCE (Temp @+25°C





Isolation		+20	Input IP3	
80	L0 - RF	+10 3rd Order	al Output	
::HHH1117	- · — RF – IF	9 0	output	/
50 HILL		10		<u>,</u>
ē ;;[]]]]]	1111	-10 -20		
± 40 8 30	1111111111			
20	<u> </u>	<sup>th</sup> -40		LO Drive Level +7dBm
10		-50 -50		RF1 Freq. 199MHz RF2 Freq. 200MHz
LO Drive Level +7dBm				IF Freq. 70MHz
0.5 1 10	100 1000			+20 +30 +40
FREQUENCY (MH	Hz)	Inpu	ut Signal Level Each 1	Tone (dBm)

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**

721-1 Maeda, Fuji-City, Shizuoka-Pref. 416-8577 Japan Tel: +81-545-31-2600 E-mail: info@rkco.jp Fax: +81-545-31-1600 URL: http://rk-microwave.com