# DOUBLE BALANCED MIXER

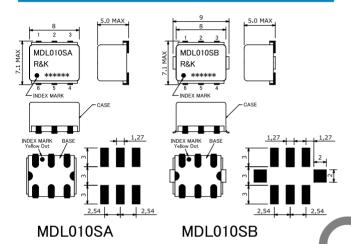


### R&K-MDL010



#### **OUTLINE DRAWING**

**XIN MILLIMETERS** 



■ Frequency : DC-500MHz
■ Low LO Drive Level : +7dBm

■ Small & Low Cost / Surface Mount

■ RoHS Compliance

#### **SPECIFICATIONS**

Frequency Range [LO&RF] : 0.5-500MHz [IF] : DC-500MHz

Conversion Loss (LO Drive Level +7dBm)

	<b>\</b>		,
	0.5 - 1MHz	1 - 300MHz	300 - 500MHz
Тур.	6.5dB	6.0dB	6.0dB
Max.	9.0dB	8.0dB	8.0dB

#### Isolation (min.)

	0.5 - 1MHz	1 - 300MHz	300 - 500MHz
LO - RF	50dB	30dB	30dB
LO - IF	40dB	30dB	25dB
RF - IF	35dB	20dB	15dB

Input IP3 @Center Band : +16dBm (typ.)
Input 1dB Comp. Point : + 3dBm (typ.)

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

#### HOW TO ORDER

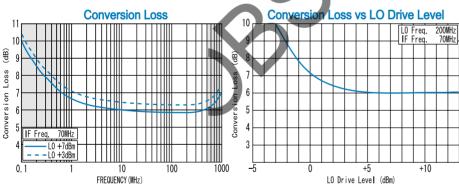
Model Name

R&K-MDL010SA-BLK

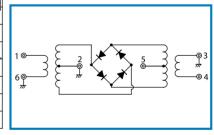
BLK=Antistatic bag
TR1=Tape & Reel Package

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

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



## SCHEMATIC



Isolation +20
70 L0 - RF L0 - IF +10
€ 0
50 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10 -40 -50
0.1 1 10 100 1000 -40
- IF (8) 0

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

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