

Surface Mount Mixer 700 - 1000 MHz

MD20-0005-MUC

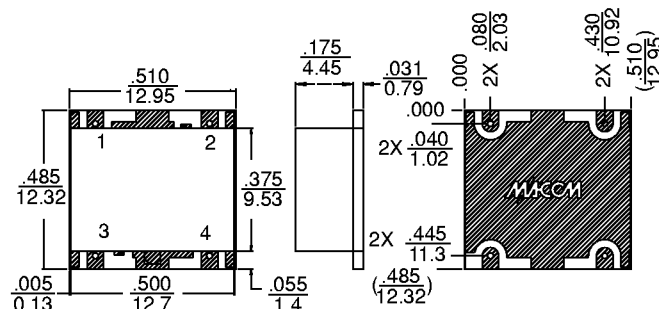
V1.00

Features

- Low Cost 0.510" x 0.485" Surface Mount Package
- High Input Third Order Intercept Point
- Low LO Power: +5 dBm
- 45 dB LO Leakage
- DC Supply +8 volts @ 50 mA Typical

Description

M/A-COM's MD20-0005-MUC is a low cost cellular band mixer in a surface mount pc board package. This device offers excellent input third order intercept point for an input LO power of +5 dBm. Its low loss and high input third order intercept point make it an ideal choice for basestation applications where local oscillator power is limited.



Ordering Information

Part No.	Description
MD22-0005-MUC	SM-41

Pin Configuration

Function	Pin No.
RF input	1
LO input	2
IF output	3
DC input	4

Electrical Specifications

Test Conditions: $T_A = +25^\circ\text{C}$, Frequency: RF, LO Ports = 700 - 1000 MHz, IF Port = DC - 150 MHz

Parameter	Test Conditions	Units	Min.	Typical	Max.
Conversion Loss	LO @ +5 dBm, IF @ 60 MHz	dB	-	7.5	10
IIP ₃	LO @ +5 dBm, IF @ 60 MHz	dBm	-	+21	-
Isolation	LO to RF	dB	15	20	-
	LO to IF	dB	40	50	-
	RF to IF	dB	35	45	-
Input Compression (1dB)	LO @ +5 dBm, IF @ 60 MHz	dBm	-	+18	-
DC Supply	@ 50 mA	Volts	-	+8	-

This Preliminary Specifications Data Sheet Contains Typical Electrical Specifications Which May Change Prior to Final Introduction.

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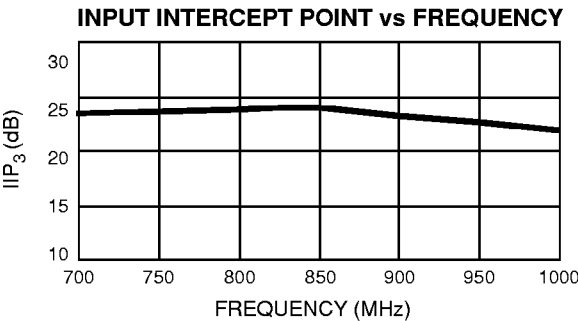
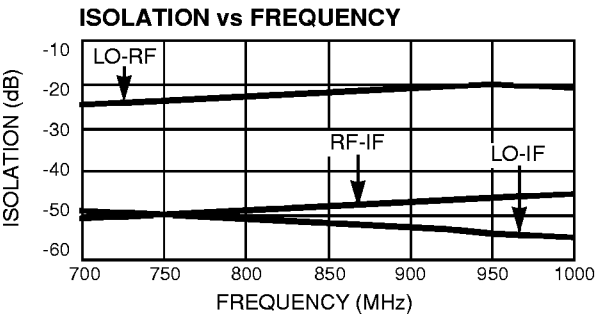
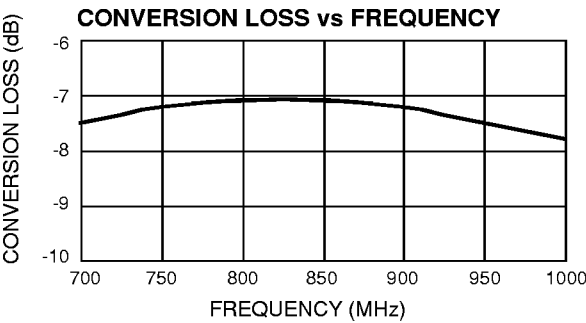
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Absolute Maximum Ratings¹

Parameter	Absolute Maximum
RF Power	+22 dBm
LO Power	+13 dBm
Total Power	+23 dBm
Operating Temp	-40°C to +85°C
Storage Temp	-65°C to +150°C
Max Current	80 mA

1. Exceeding these limits may cause permanent damage.
2. Ambient temperature (T_A) = +25°C

Typical Performance @ +25°C



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