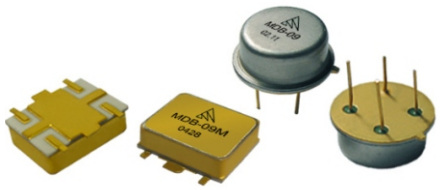
MDB-09/MDB-09M

Broadband Double-balanced Mixer

Features

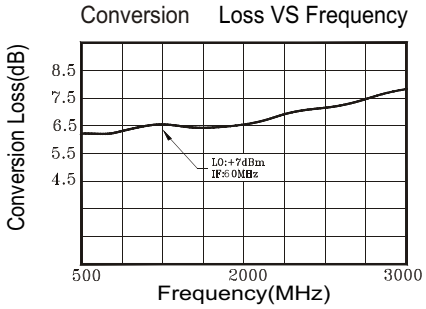
- LO drive level : +7dBm(Typ)
- LO&RF frequency range:500～3000MHz
- High port-to-port isolation
- Low Conversion Loss, 50 Ω impedance
- Hermetic TO-8C and SG03 package available
- Operating temperature range:-55℃～+85℃

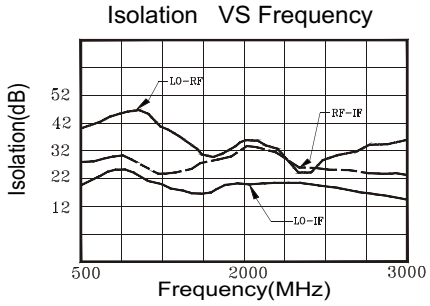


Specifications(measured in a 50Ω system, T_A=25℃)

Parameter		Symbol	Unit	Guaranteed	Typical
Frequency Range	LO&RF	f	MHz	500～3000	500～3000
	IF			DC～600	DC～700
Conversion Loss		C. L	dB	7(500～1000MHz)	6(500～1000MHz)
				8. 0(1000～2000MHz)	6. 5(1000～2000MHz)
				9. 0(2000～3000MHz)	8. 0(2000～3000MHz)
Iso	LO-RF	Iso	dB	35(500～800MHz)	45(500～800MHz)
				28(800～2000MHz)	35(800～2000MHz)
	LO-IF			20(2000～3000MHz)	25(2000～3000MHz)
				20(500～800MHz)	24(500～800MHz)
	RF-IF			14(800～3000MHz)	20(800～3000MHz)
				20(500～3000MHz)	32(500～3000MHz)
1dB Compression point		P_{-1}	dBm	0	2
Input Intercept 3rd order point		IP3	dBm	—	12

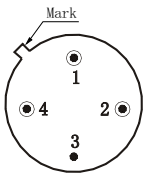
Typical Performance



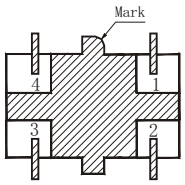


Absolute Maximum Ratings

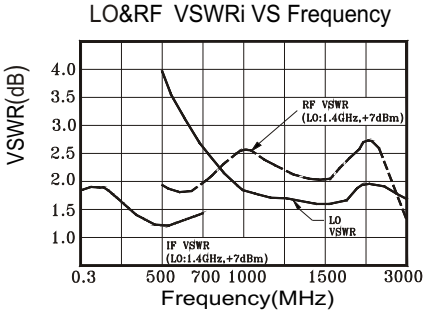
RFInput Power : +13dBm
Storage Temp: +125℃



TO-8C
Bottom View

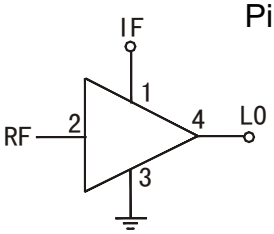


SG03
Bottom View



Application Notes:

1.LO drive level : +7dBm
2.Input/output pin should be connected to 50Ω microstrip.
3.MDB-09:TO-8C Package
MDB-09M :SG03 package
4.See assembly section for mounting information



Pin connection:

1.IF
2.RF
3.GND
4.LO
Metal case is ground