Frequency Mixer
1 – 2700 MHz

AM002713XD-P3
December 2020
Rev 0

DESCRIPTION

AMCOM's AM002713XD-P3 is a high IP3 passive double balanced mixer operates with LO drive level range of +14dBm to +20dBm.

FEATURES

- LO/RF: 1-2700MHz
- IF: 1-2000MHz
- LO Level: +17dBm
- Conversion Loss: 7dB
- RF Input: Up to +13dBm
- Input IP3: +27.8dBm
- SMA Connector

APPLICATIONS

- Telecom Infrastructure
- Military & Aerospace
- VSAT
- Test & Instrumentation
- Radar
- Communication

Electrical Specifications @ +25°C, IF=100MHz, LO=+17dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	1		2700
IF	MHz	1		2000
Conversion Loss	dB		7.0	9.5
LO-RF Isolation				
10-2000 MHz	dB	24	39	
10-2500MHz	dB	18	37	
LO-IF Isolation				
10-2000MHz	dB	20	36	
10-2500MHz	dB	16	34	
RF-IF Isolation				
10-2200MHz	dB	20	25	
RF VSWR			2.0:1	2.5:1
IF VSWR			1.5:1	2.0:1
RF Input Power up to	dBm	+3	+6	
IIP3 (Center Band)	dBm	+17	+20	

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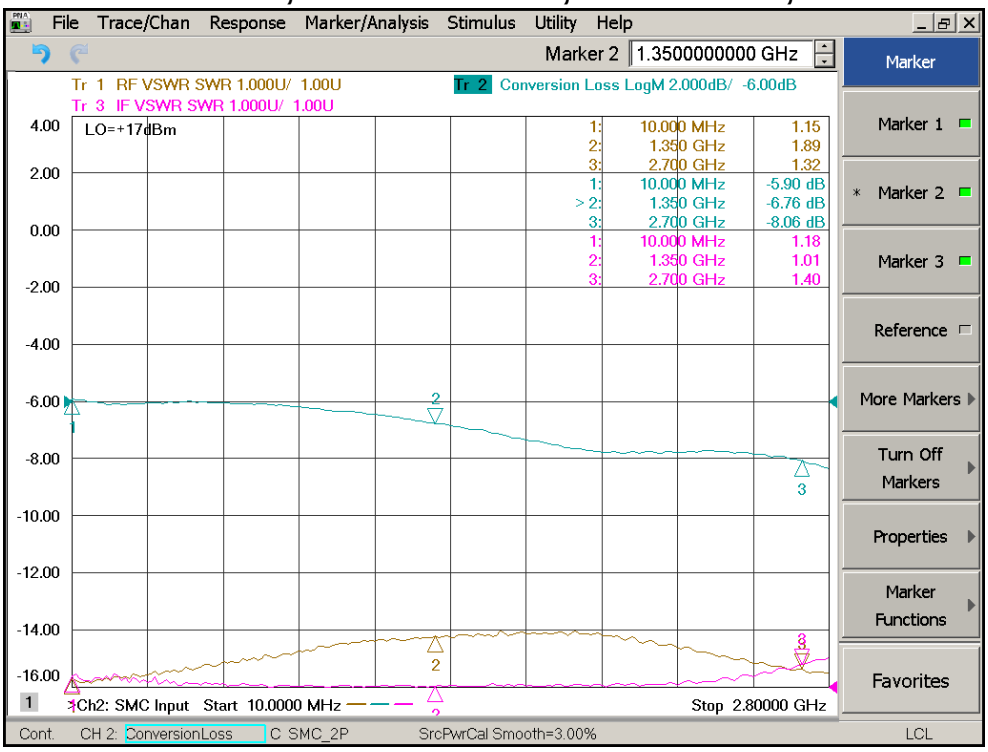
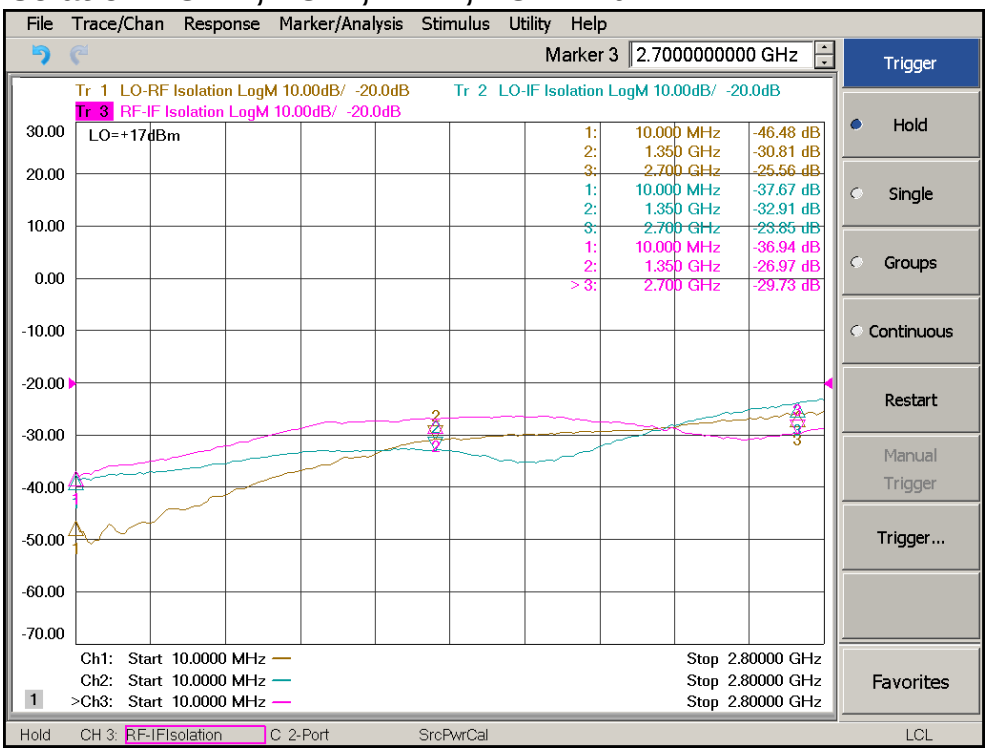
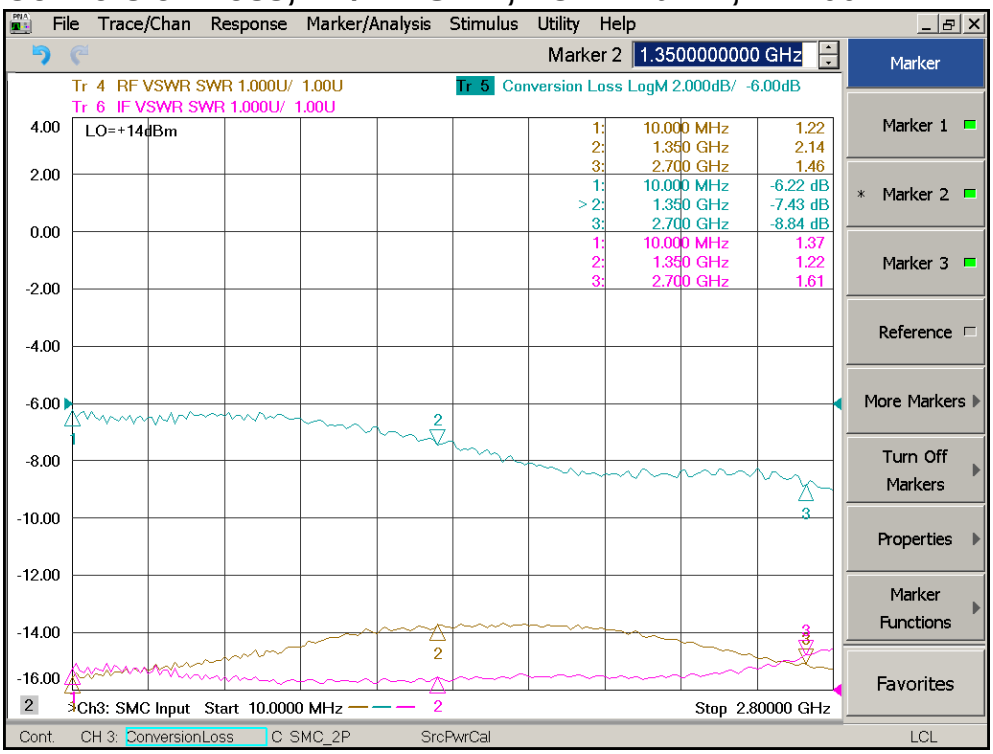
Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, IF=100MHz



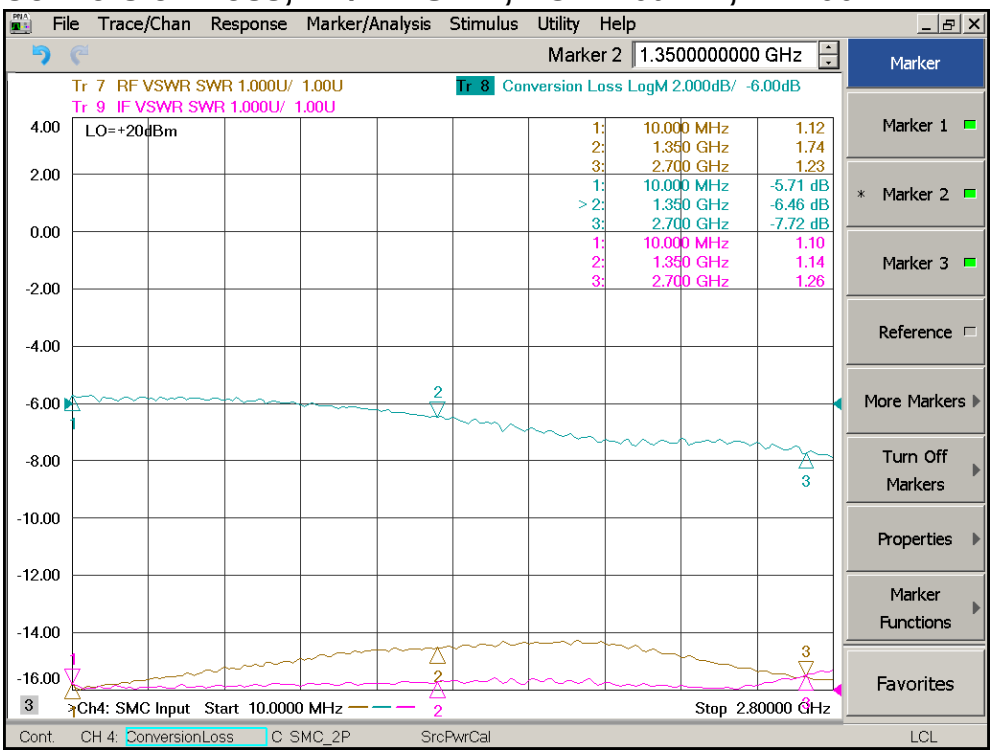
Isolation LO-RF, LO-IF, RF-IF, LO=+17dBm



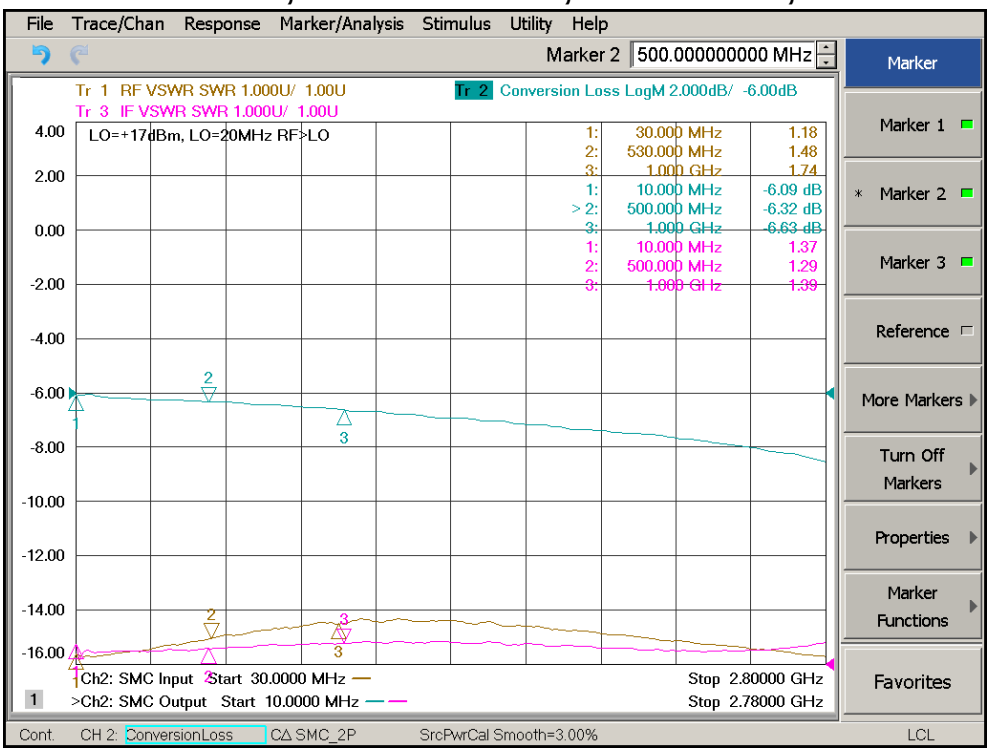
Conversion Loss, RF/IF VSWR, LO=+14dBm, IF=100MHz



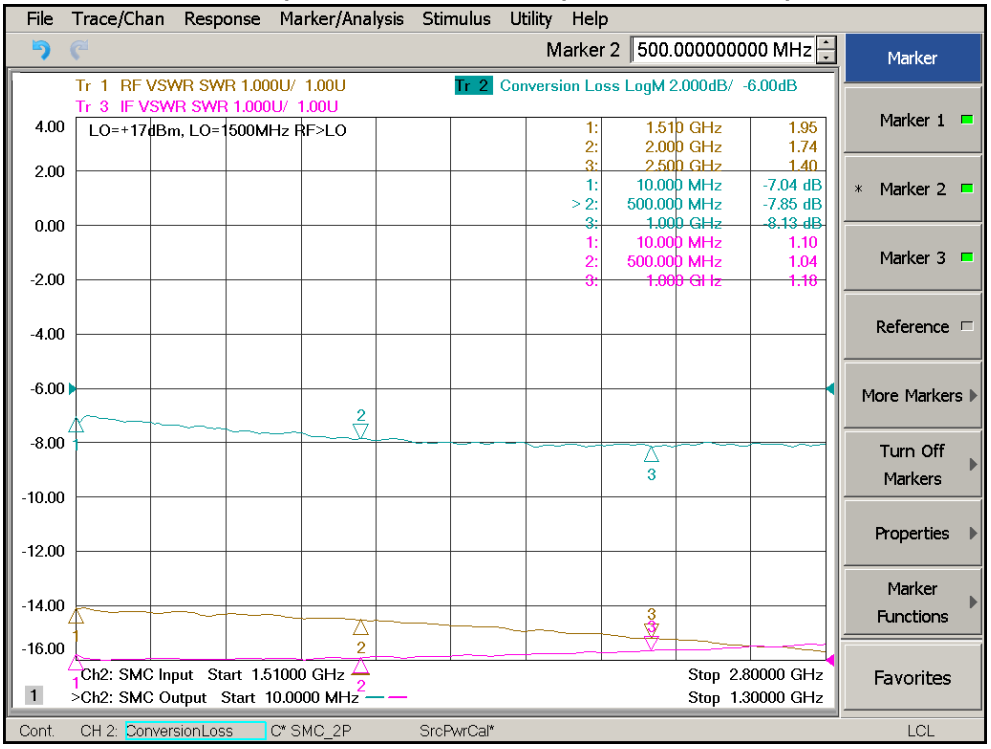
Conversion Loss, RF/IF VSWR, LO=+20dBm, IF=100MHz



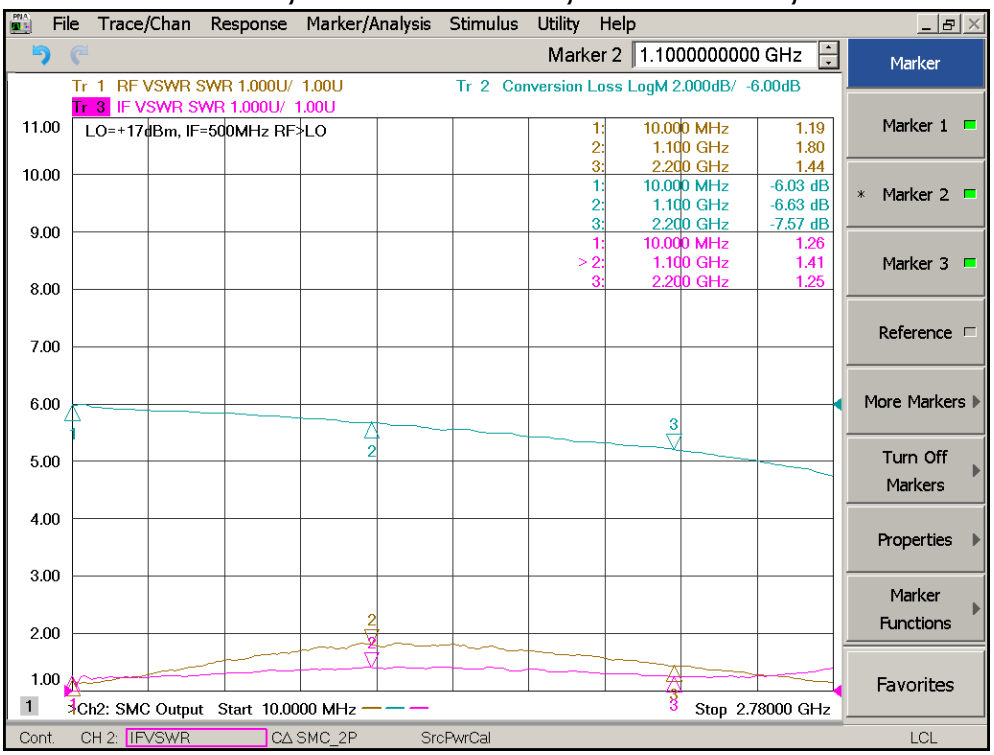
Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, LO=20MHz



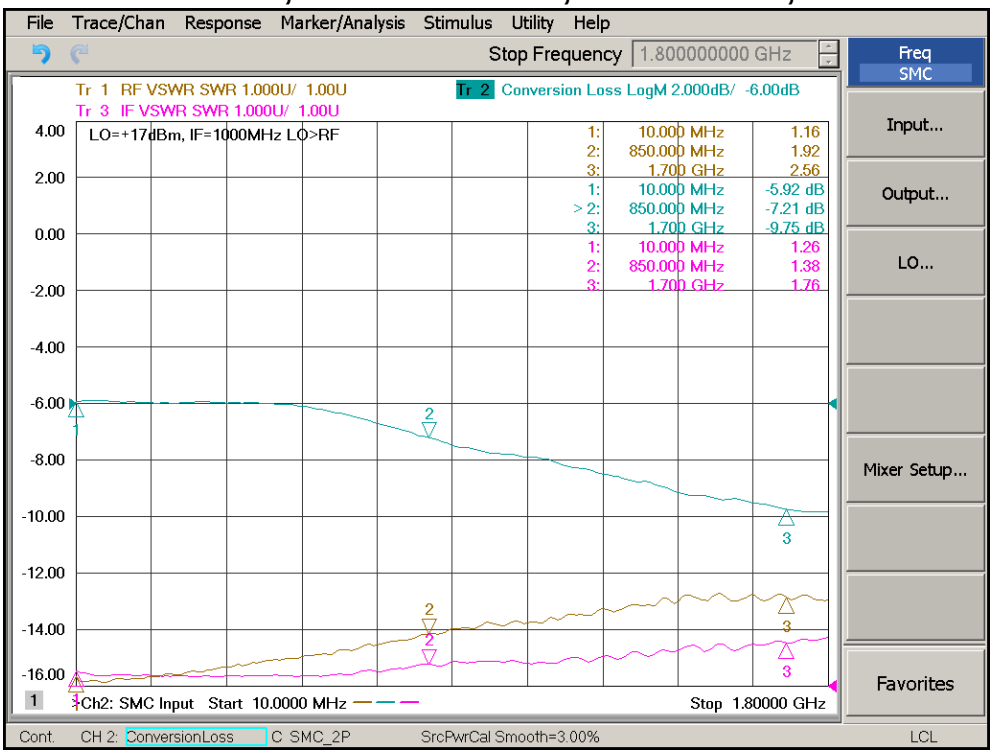
Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, LO=1500MHz



Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, IF=500MHz



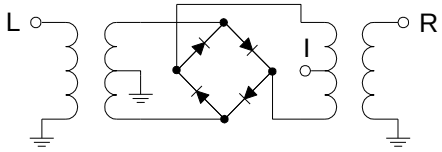
Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, IF=1000MHz



Absolute Maximum Ratings

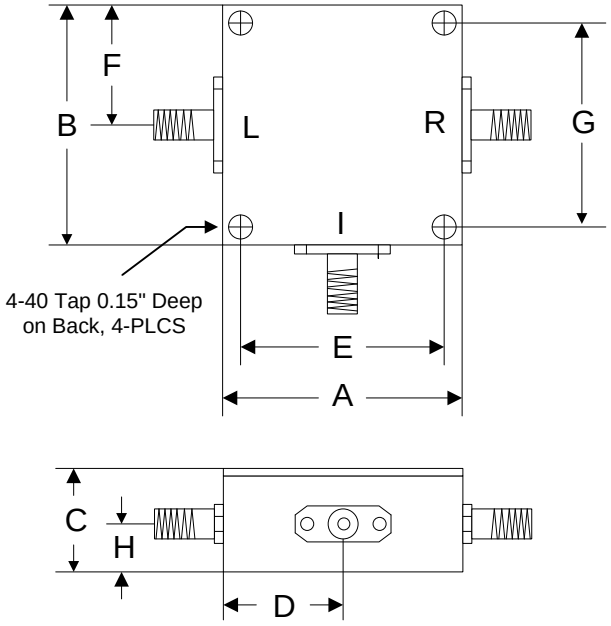
Parameter	Absolute Maximum
RF/LO Input Power	+23dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

Schematic



ESD Sensitive Material

Outline



	A	B	C	D	E	F	G	H
Inch	1.250	1.250	0.563	0.625	1.000	0.625	1.000	0.250
mm	31.75	31.75	14.29	15.88	25.40	15.88	25.40	6.35