

Mixers

Space Qualified

MD-S50XX Series

V2.00

Electrical Specifications

Part #	MD-S5007	MD-S5008	MD-S5010
Description	Mixer with LO Drive	RF Mixer	RF Mixer
Frequency Range			
LO	800–2000 MHz	10–1000 MHz	1140–1190 MHz
RF	200–1700 MHz	10–1000 MHz	1300–1650 MHz
IF	200–1700 MHz	10–1000 MHz	160 MHz
Conversion Loss	8.0 dB max	8.0 dB max	7.5 dB max
Conversion Loss Variation vs LO Drive	0.1 dB max	—	0.2 dB max
VSWR	2.0:1 max	2.0:1 max	2.0:1 max
LO Power	–8 to –12 dBm	+7 dBm	+9 to +11.5 dBm
Isolation			
LO–RF	7 dB min	25 dB min	35 dB min
LO–IF	4 dB min	30 dB min	30 dB min
RF–IF	22 dB min	30 dB min	30 dB min
RF Noise Figure	9.0 dB max	9.0 dB max	8.5 dB max
2-Tone IM Ratio	52 dBc min	40 dBc min	50 dBc min
Inband Spurious			
2RF+2LO	–50 dBc min	—	—
2RF+3LO	–50 dBc min	—	—
3RF+2LO	–50 dBc min	—	—
1 dB Comp Point	+7 dBm min	—	—
Bias Current@ +5 Vdc	90 mA max	—	—