

SIGNAL GENERATOR

RACK MOUNT MODEL: MTS3000-3501050

WIDE BANDWIDTH

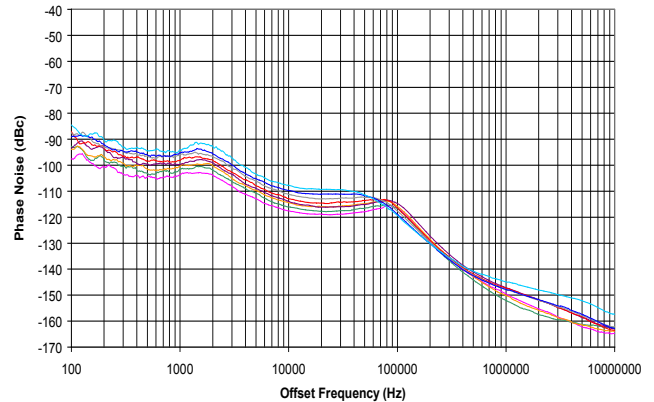
350 - 1050 MHz

FEATURES:

- ▶ Over an octave bandwidth tuning
- ▶ Small step size resolution
- ▶ Outstanding spectral purity
- ▶ High spurious rejection
- ▶ Fast lock settling time
- ▶ Easy programmable format
- ▶ 3 HU 19" Rack Cassette
- ▶ Also available as piggy back board
- ▶ RoHS Compliant



Phase Noise



SPECIFICATIONS

RF Output Frequency Range	Output Options	
	Amplifier Option	350 - 1050 MHz*
	Divider Option	5.5 - 1050 MHz
Bandwidth	700 MHz	
Step Size	1 Hz	
Internal Reference (TCXO or OCXO)		
	TCXO Specifications	12.8 MHz
	Temperature Stability	$\pm 1.5 \times 10^{-6}$
	Aging first year	$\pm 2.0 \times 10^{-6}$
	Operating Temp. Range	-10 to +60 °C
	With frequency adjustment through voltage control pin.	
	OCXO Specifications	13 MHz
	Temperature Stability	$\pm 2.0 \times 10^{-8}$
	Aging first year	$\pm 1.0 \times 10^{-7}$
	Operating Temp. Range	-10 to +70 °C
	Warm-Up Time	10 min.
External Reference Input	10, 12.8, 13, 19.44 MHz	
Bias Voltage	VCC: +13 VDC (± 3 V)	
Supply Current	< 800 mA @ 13 V	
Bias Voltage Ripple	100 mV p-p (Max.)	
Spurious Suppression	-65 dBc (Max.)	

Switching Speed

Per programming step	≤ 8.0 mSec.
After Turn-On	< 1.0 Sec.

Amplifier Option

RF Output Power	+10 dBm (Min.)
RF Output Power (Unlocked)	≤ -20 dBm
Harmonic Suppression	15 dB (Min.)

Divider Option

RF Output Power	PECL signal = ~ 1 dBm @ 50 ohms
RF Output Power (Unlocked)	- - -
Harmonic Suppression	-8 dB (Min.)

Maximum Phase Noise

Offset	Freq: 350 MHz (dBc/Hz.)	Freq: 1050 MHz (dBc/Hz.)
10 kHz	-115	-110
100 kHz	-115	-115
1 MHz	-140	-140

Output Impedance	50 Ohms (Nom.)
Operating Temperature Range	See reference option
Storage Temperature Range	-40 to +85 °C

Programming Interface: 3.3V SPI, 3.3V I²C, RS232 or (Ethernet - special development requires NRE and longer leadtime)

* Other options available with bandwidth up to 3:1 - frequencies ranging from 60 to 6500 MHz.

This product is manufactured under one or more of the following patents:
Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381
Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823;
60/605791; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787
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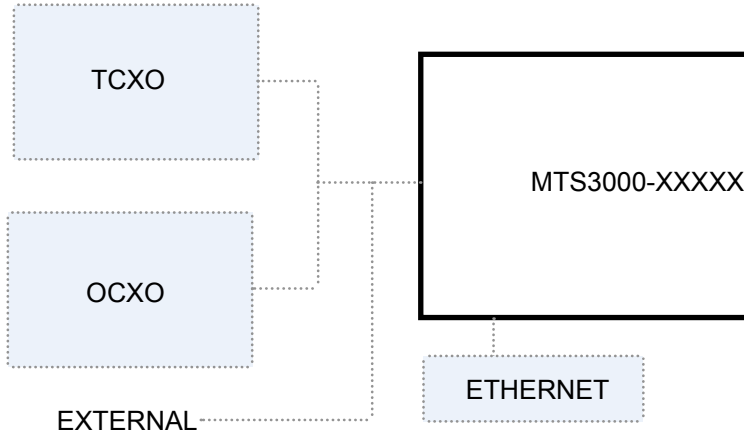
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OPTIONS:

Reference Options

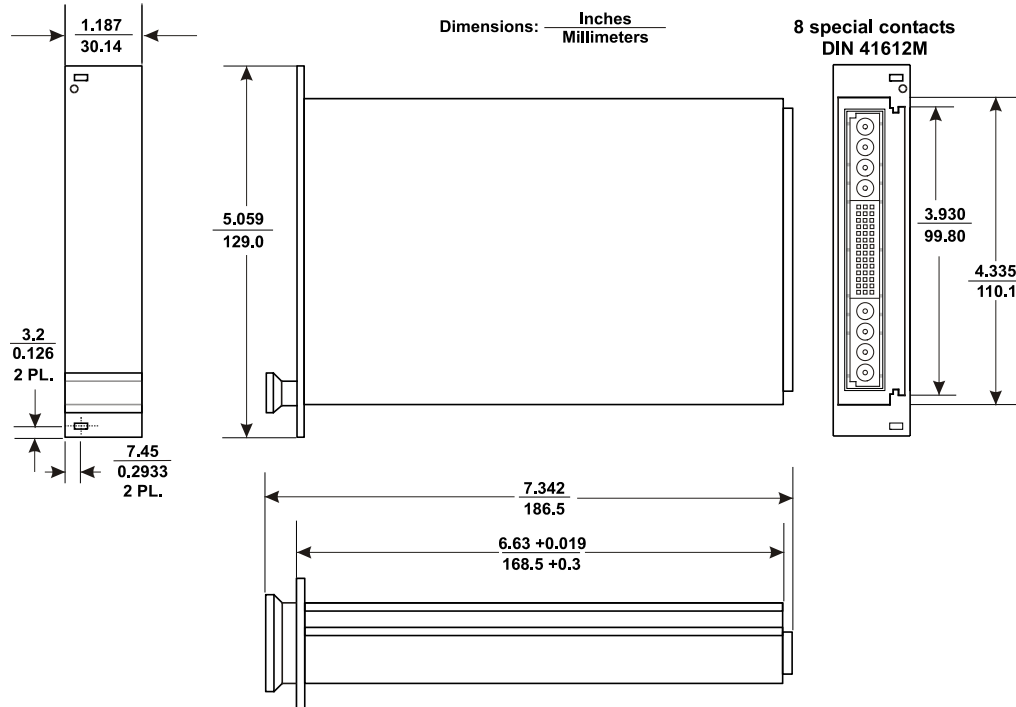


Output Options

AMPLIFIER
350 - 1050 MHz

DIVIDER
~5.5 - 1050 MHz

Package # 279



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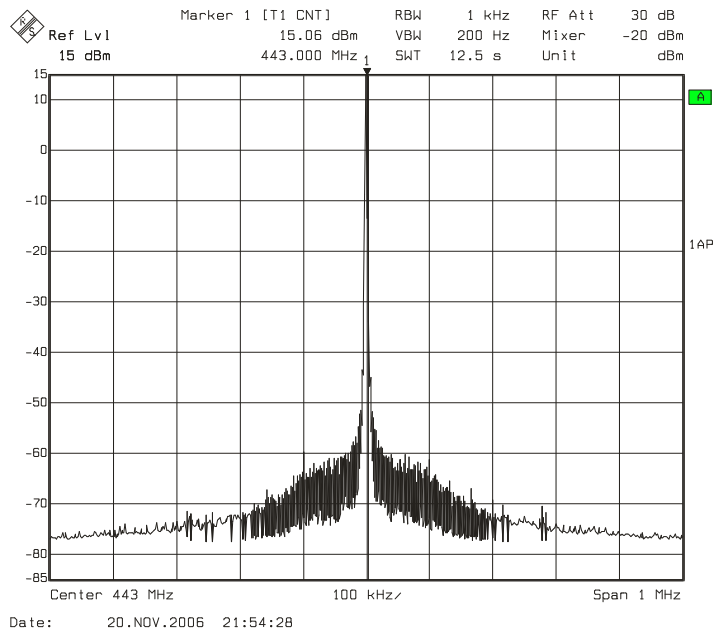
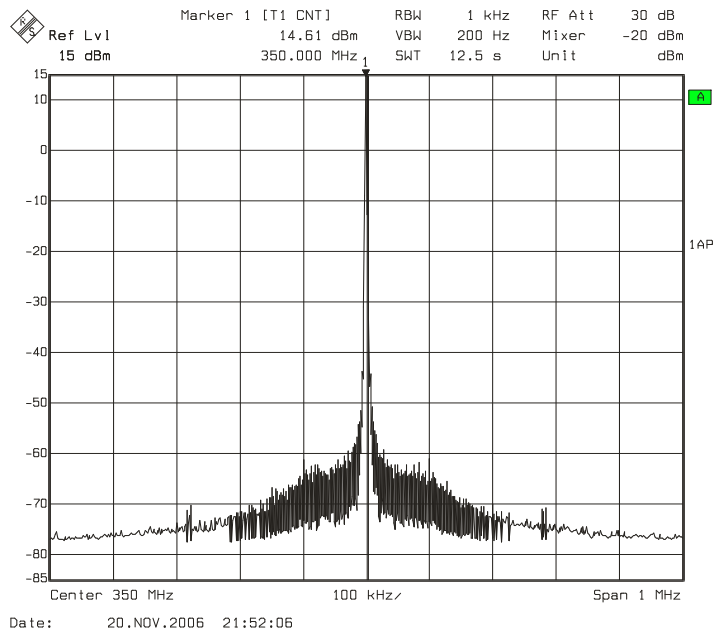
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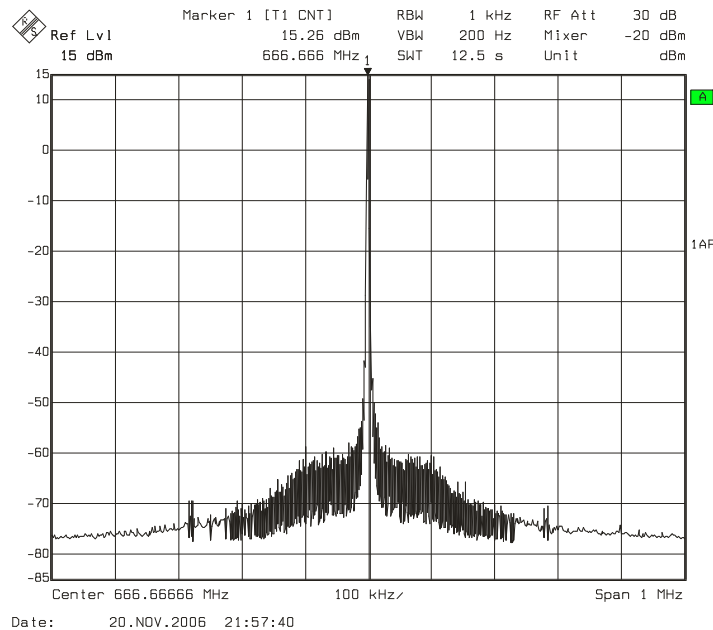
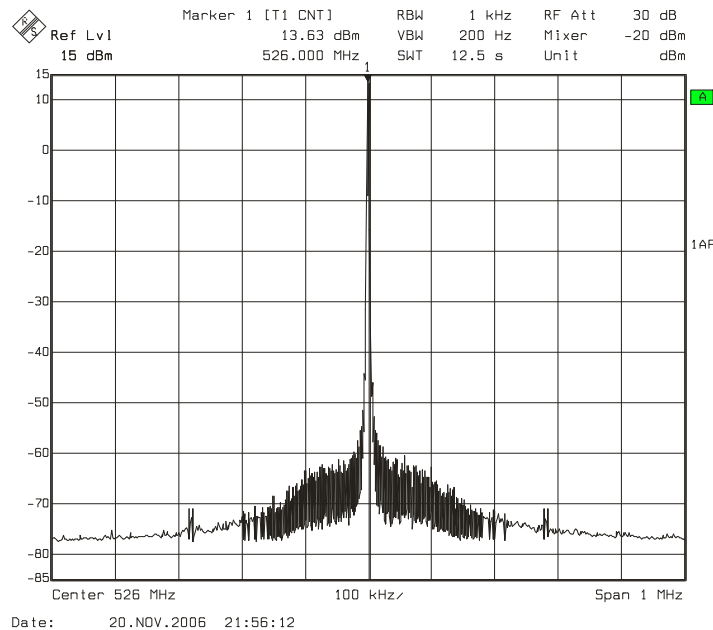
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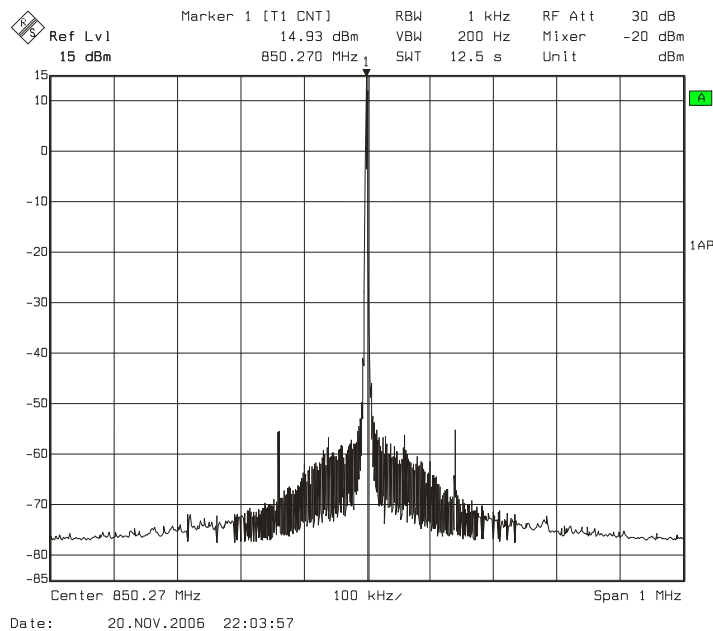
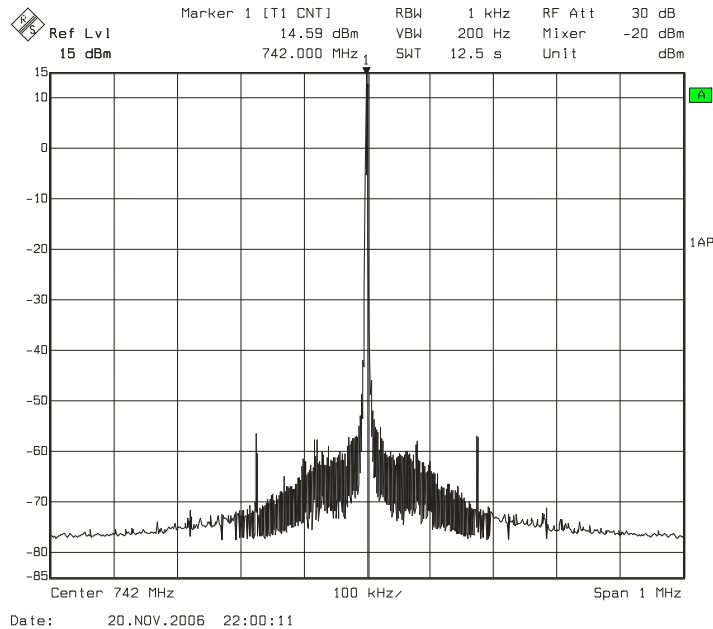
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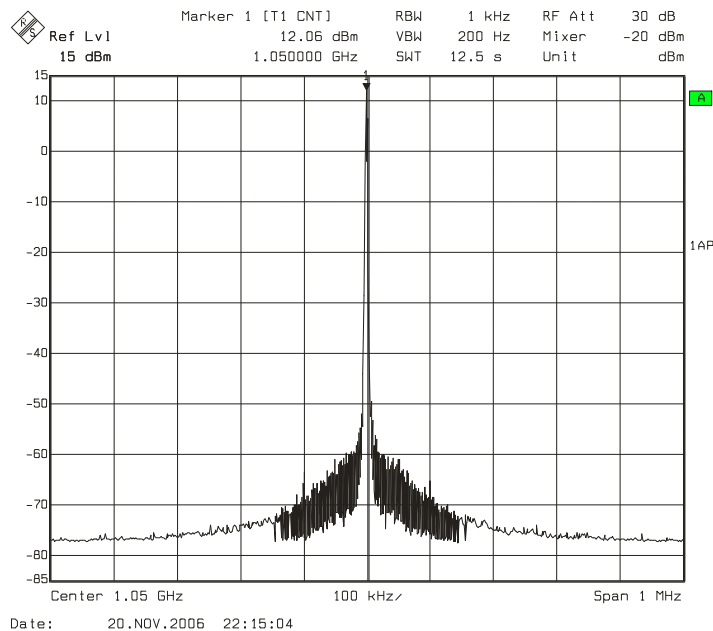
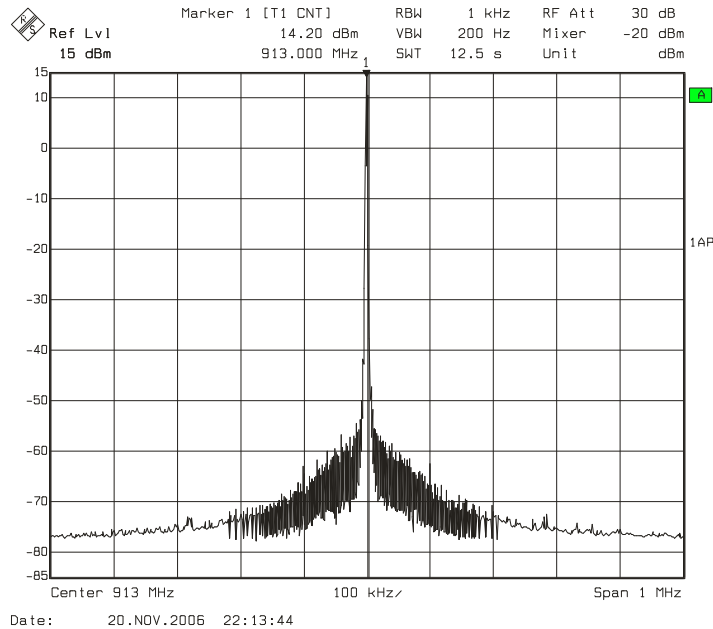
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