## **ISM92** Series



5.0

### **Product Features:**

Frequency

Output Level

Rise / Fall Time

Frequency Stability

Output Load

Start-up Time

Time

Current

Operating

Storage

Enable / Disable

Supply Voltage

Jitter: RMS(1sigma) 1 MHz-75 MHz

76 MHz-125 MHz

Max Integrated 1 MHz-75 MHz

76 MHz-125 MHz

Max Total Jitter

1 MHz-75 MHz 76 MHz-125 MHz

HC-MOS TTL Duty Cycle

Low Jitter, Non-PLL Based Output CMOS/TTL Compatible Logic Levels Compatible with Leadfree Processing

### **Applications:**

Fibre Channel Server & Storage Sonet /SDH 802.11 / Wifi T1/E1.T3/E3 System Clock

802.11 / Wifi T1/E1.T3/E3 System Clock	
1.5 MHz to 125.000 MHz'0' = 0.1 Vcc Max., '1' = 0.9 Vcc Min. '0' = 0.4 VDC Max., '1' = 2.4 VDC Min.Specify 50% $\pm 10\%$ or $\pm 5\%$ See Table in Part Number Guide5 nS Max. @ Vcc = $+3.3$ VDC, 10 nS Max. @ Vcc = $\pm 5$ VDC ***Fo < 50 MHz = 10 TTL, Fo > 50 MHz = 5 LSTTL See Table in Part Number GuideSee Frequency Stability Table (Includes room temperature tolerance and stability over operating temperature)10 mS Max. 	1.6  mm. $1.6  mm.$ $1.135$
5 pS RMS (1 sigma) Max. accumulated jitter (20K adjacent periods) 3 pS RMS (1 sigma) Max. accumulated jitter (20K adjacent periods) 1.5 pS RMS (1 sigma -12KHz to 20MHz) 1 pS RMS (1 sigma -12KHz to 20MHz) 50 pS p-p (100K adjacent periods) 30 pS p-p (100K adjacent periods)	PinConnectionsPin 1Enable / DisablePin 2GroundPin 3OutputPin 4VddDimension Units: mm

Part Number Guide Sample Part Number: ISM91 - 3251BH - 20.000								
Package	Input Voltage	Operating Temperature	Symmetry (Duty Cycle)	Output	Stability (in ppm)	Enable / Disable	Frequency	
ISM92 -	5 = 5.0 V	1 = 0° C to +70° C	5 = 45 / 55 Max.	1 = 10TTL / 15 pF HC-MOS	**E = ±10	H = Enable		
	3 = 3.3 V	6 = -10° C to +70° C	6 = 40 / 60 Max.	5 = 50 pF HC-MOS (<40 MHz)	**D = ±15	O = N/C		
	7 = 3.0 V	3 = -20° C to +70° C		6 = 30 pF	**F = ±20		- 20.000MHz	
	2 = 2.7 V	4 = -30° C to +75° C			**A = ±25			
	6 = 2.5 V	2 = -40° C to +85° C			B = ±50			
	1 = 1.8 V*				$C = \pm 100$			

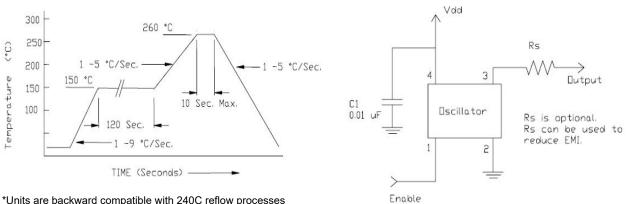
NOTE: A 0.01 µF bypass capacitor is recommended between Vcc (pin 4) and GND (pin 2) to minimize power supply noise. \* Not available at all frequencies. \*\* Not available for all temperature ranges. \*\*\* Frequency, supply, and load related parameters.

# **ISM92** Series



### **Pb Free Solder Reflow Profile:**

**Typical Application:** 

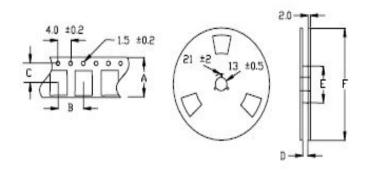


\*Units are backward compatible with 240C reflow processes

#### Package Information:

MSL = N.A. (package does not contain plastic, storage life is unlimited under normal room conditions). Termination = e4 (Au over Ni over W base metallization).

### **Tape and Reel Information:**



Quantity per Reel	1000
Α	16 ± 0.3
В	8 ± 0.2
C	7.5 ± 0.2
D	17.5 ± 1
E	50 / 60 / 80
F	180 / 250