: LC&) &% A!7 A CG Cff ¢ÁŒÁ { ÁĴT ÖÂÔ} • ŒÁJ• & A A E

#### **Features and Benefits**

Typical 2.5 x 2.0 x 0.81 mm ceramic SMD package Operation supply voltage: 1.8V, 2.5V and 3.3V FASTXO series, Fast delivery at any frequency Tri-State Enable/Disable Frequency Stability ±25ppm over -40 to 105 °C Pb-free/RoHS compliant

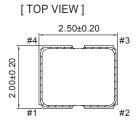
### **Typical Applications**

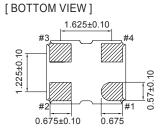
Computer Peripherals Set-top Box, HDTV DSC, PDA

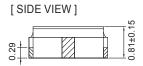
#### **Mechanical Drawing & Pin Connections**

**Drawing No:** 

MD20003+-1







Pin#	Function
1	Tri-State
2	GND
3	Output
4	VDD

Solder PAD Layout

Unit in mm 1mm = 0.0394 inches

0.80	0.1µF	
o <u>,</u>	1.625	

To ensure optimal oscillator performance, place a by-pass capacitor of  $0.1\mu F$  as close to the part as possible between Vdd and GND pads.

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## **Specifications**

Charification	Conditon	3.3V		2.5V		1.8V		11	
Specification		Min.	Max.	Min.	Max.	Min.	Max.	Unit	
Supply Voltage Variation		V <sub>DD</sub> - 5%	V <sub>DD</sub> +5 %	V <sub>DD</sub> - 5%	V <sub>DD</sub> + 5%	V <sub>DD</sub> - 5%	V <sub>DD</sub> +5 %	V	
Frequency Range		1	200	1	200	1	125	MHz	
Supply Current	15pF Loading	-	35	-	30	-	20	mA	
Stand by Current	OE mode	-	20	-	20	-	20	mA	
Output Load			15				•	pF	
Output Lovel	Output High	0.9 V <sub>DD</sub>	-	0.9 V <sub>DD</sub>	-	0.9 V <sub>DD</sub>	-		
Output Level	Output Low	-	0.1 V <sub>DD</sub>	-	0.1 V <sub>DD</sub>	-	0.1 V <sub>DD</sub>	V	
Transition	Rise/Fall Time	-	2	-	2	-	3	nSec	
Duty Cycle		45	55	44	45	45	55	%	
Start Time		-	8	-	8	-	8	mSec	
Tri-State	Enable	0.7 V <sub>DD</sub>	-	0.7 V <sub>DD</sub>	-	0.7 V <sub>DD</sub>	-	V	
III-Glate	Disable	-	0.3 V <sub>DD</sub>	-	0.3 V <sub>DD</sub>	-	0.3 V <sub>DD</sub>	V	
RMS Phase Jitter	12KHz to 20MHz	-	1.5	-	1.5	-	1.5	pSec	
Aging	@25°C 1st year	-	±3	-	±3	-	±3	ppm	
Storage Temp. Range		-50°C to +125°C				°C			

Note: \*Transition times are measured between 10% and 90% of VDD with an output load of 15pF

# **Frequency Stability vs. Temperature**

	±15PPM	±20PPM	±25PPM	±50PPM
-20°C to +70°C	Conditional	Available	Available	Available
-40°C to +85°C	Not Available	Conditional	Available	Available
-40°C to +105°C	Not Available	Not Available	Conditional	Available

Note: not all combination of options are available. Other specifications may be available upon request.