

# 8W-20.000MBA-T Datasheet



[www.digi-electronics.com](http://www.digi-electronics.com)

<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	8W-20.000MBA-T-DG
Manufacturer	<a href="#">TXC CORPORATION</a>
Manufacturer Product Number	8W-20.000MBA-T
Description	XTAL OSC XO 20.0000MHZ CMOS SMD
Detailed Description	20 MHz XO (Standard) CMOS Oscillator 3.3V Enable /Disable 4-SMD, No Lead

This model 8W-20.000MBA-T is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

8W-20.000MBA-T

Series:

8W

Base Resonator:

Crystal

Frequency:

20 MHz

Output:

CMOS

Frequency Stability:

±25ppm

Operating Temperature:

-10°C ~ 70°C

Ratings:

-

Package / Case:

4-SMD, No Lead

Height - Seated (Max):

0.035" (0.90mm)

Manufacturer:

TXC CORPORATION

Product Status:

Active

Type:

XO (Standard)

Function:

Enable/Disable

Voltage - Supply:

3.3V

Absolute Pull Range (APR):

-

Current - Supply (Max):

15mA

Mounting Type:

Surface Mount

Size / Dimension:

0.098" L x 0.079" W (2.50mm x 2.00mm)

Current - Supply (Disable) (Max):

-

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8542.39.0001

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



### Features

Frequency range : 4MHz to 125MHz  
 Compact and thin  
 SMD seam sealing ceramic package  
 Supply voltage : 1.8V ~ 3.3V  
 CMOS output  
 Tri-state function available  
 External dimensions (mm)  
 L : 2.5 x W : 2.0 x H : 0.8  
 RoHS compliant & Pb free

### Applications

Mobile phone, Wearables  
 Networking, Server, Storage  
 Wireless communications  
 Fibre channel, Ethernet, SATA, SAS,  
 PCI-E, USB, WLAN, BT  
 Notebook, HDD, SSD, Graphics card,  
 Computer peripherals  
 Audio, Video, Gaming, DSC, IP CAM,  
 Portable consumer products

### Electrical Characteristics

Item	8W	Conditions
Frequency Range ( $F_0$ )	4MHz ~ 125MHz	
Frequency Stability ( $F_{stab}$ )	$\pm 50$ ppm, $\pm 25$ ppm	Note [1]
Operating Temperature Range ( $T_{OTR}$ )	-40°C ~ +85°C	
Supply Voltage ( $V_{DD}$ )	1.8V, 2.5V, 3.3V	$V_{DD} \pm 10\%$
Current Consumption ( $I_{DD}$ )	10 mA Max.	
Output Type	CMOS	
Output Load ( $C_L$ )	15 pF	
Output Voltage High ( $V_{OH}$ )	90% $V_{DD}$ Min.	
Output Voltage Low ( $V_{OL}$ )	10% $V_{DD}$ Max.	
Rise & Fall Time ( $T_r / T_f$ )	5 ns Max.	10% ~ 90% of $V_{DD}$
Duty Cycle	45% ~ 55%	
Start-up Time	5 ms Max.	
Enable Voltage High, Logic "1"	70% $V_{DD}$ Min.	Input to Pin1 Note [2]
Enable Voltage Low, Logic "0"	30% $V_{DD}$ Max.	
Phase Jitter, RMS	1 ps Max.	Note [3]
Aging ( $F_{aging}$ )	$\pm 3$ ppm Max.	at 25°C $\pm 3$ °C, first year
Storage Temperature Range ( $T_{STR}$ )	-55°C ~ +125°C	

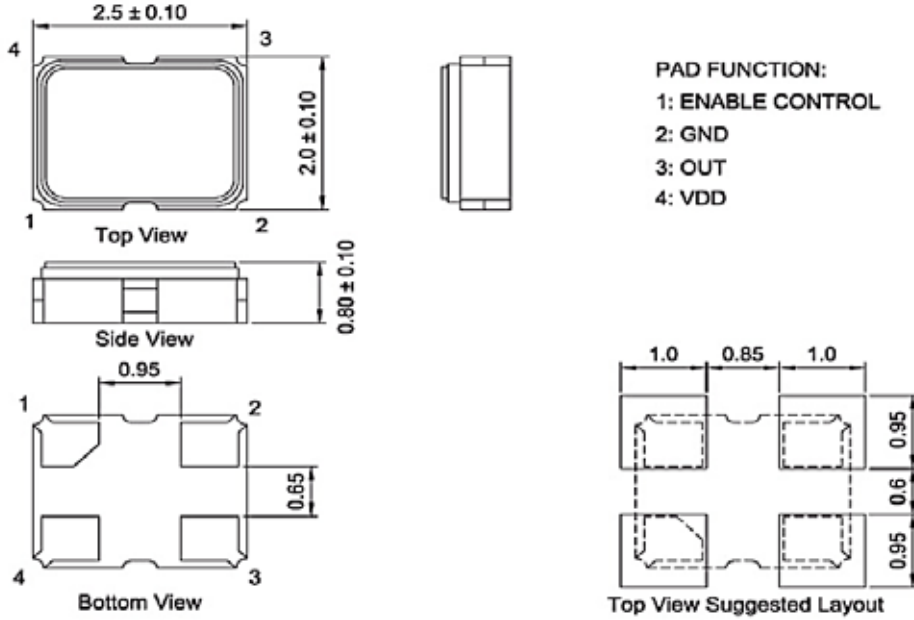
#### Notes:

- [1] Inclusive of frequency tolerance at 25°C, 1st year aging at 25°C, and variations over operating temperature, supply voltage, and load.
- [2] Output will be enable if Pin1 is Logic "1" or Open; Output will be disable if Pin1 is Logic "0".
- [3] Freq. 10MHz~40MHz, integrated 12kHz~5MHz; Freq. >40MHz, integrated 12kHz~20MHz.



# 8W MHz CMOS Oscillator

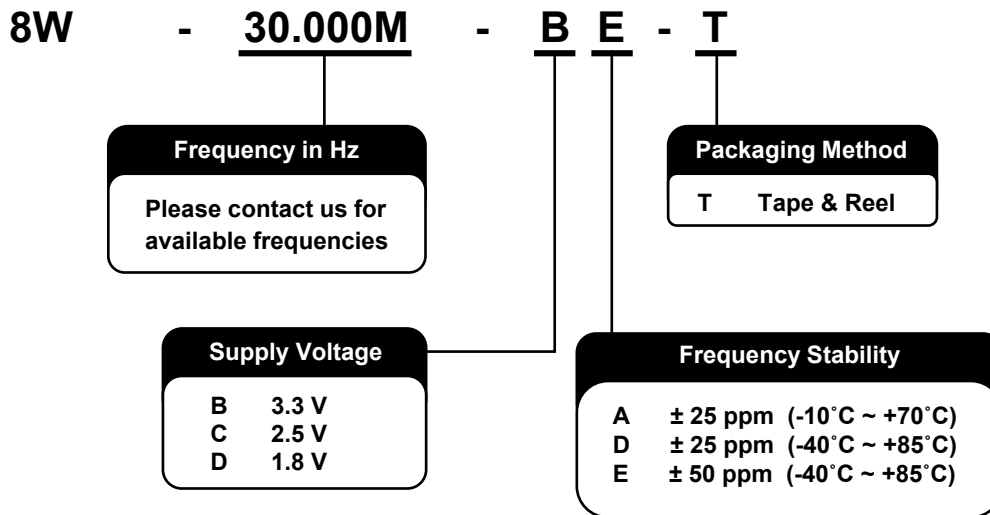
## Dimensions



**PAD FUNCTION:**  
 1: ENABLE CONTROL  
 2: GND  
 3: OUT  
 4: VDD

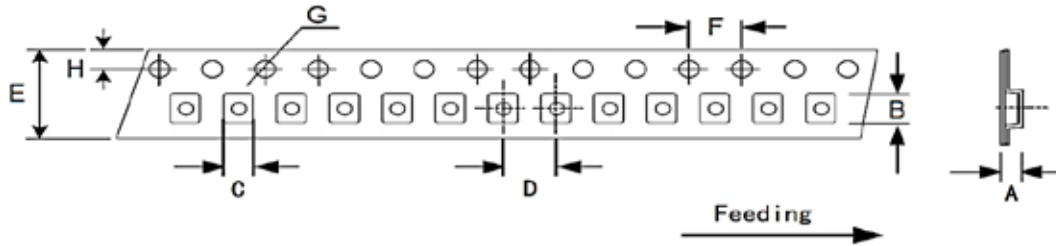
(Unit: mm)

## Ordering Information



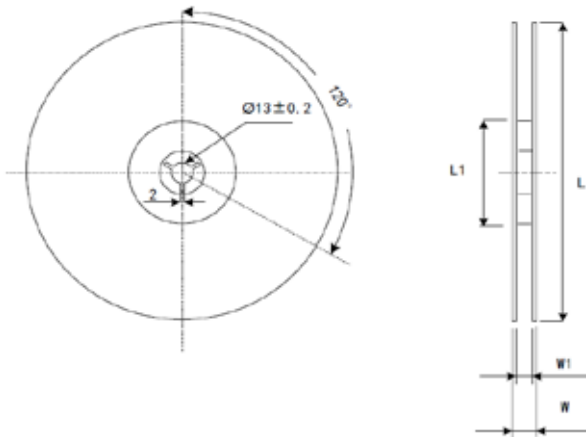


### Packing



DIMENSIONS	A	B	C	D	E	F	G	H
		1.15 ±0.05	2.70 ±0.05	2.25 ±0.05	4.00 ±0.10	8.00 ±0.20	4.00 ±0.10	1.55 ±0.05

(Unit: mm)



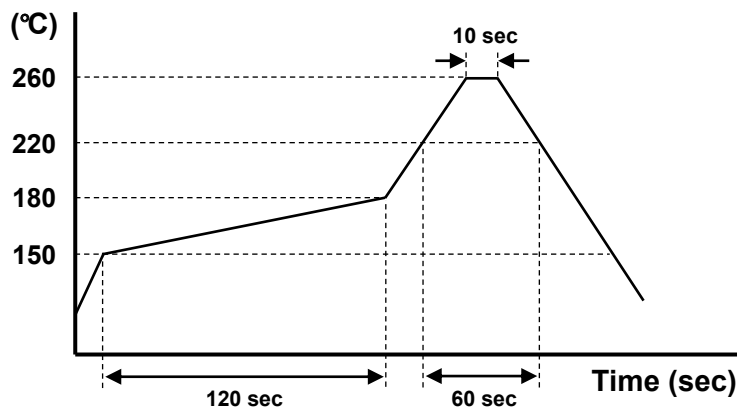
DIMENSIONS	L	L1	W	W1
		180 0/-3	60 +1/0	11.4 ±0.1

(Unit: mm)

### Reflow Profile

Solder melting point : 220°C ± 10°C, 60 sec. Min.

Peak temperature : 260°C ± 10°C, 10 sec. Min.



## OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.