

## Typical Applications

SONET/SDH  
 Synthesizers  
 Optimized for Semtech SONET /  
 SDH Synchronization Sets

## Features

Stratum 3 Compliant  
 Tight Stability  
 Low Aging

## Previous Vectron Model Numbers

MC1200; TC-210

## Frequency Range

10 MHz – 200 MHz

## Standard Frequencies

12.8 MHz, 16.384, 20 MHz, 30.15 MHz, 37.5 MHz, 76.8 MHz

## Frequency stabilities<sup>1</sup> [ Stratum 3 TCXO]

Parameter	Min	Typ	Max.	Units	Operating temp range	Ordering Code <sup>5</sup>
vs. operating temperature range (Referenced to +25°C)	-0.8		+0.8	ppm	-40 ... +85°C	F807
	-0.28		+0.28	ppm	-30 ... +85°C	G287
	-0.8		+0.8	ppm	-20 ... +70°C	D807
	-0.28		+0.28	ppm	-20 ... +70°C	D287
	-0.28		+0.28	ppm	0 ... +50°C	B287
Parameter	Min	Typ	Max.	Units	Condition	
Initial tolerance	- 1.5		+1.5	ppm	at time of shipment, nominal EFC	
vs. supply voltage change	- 0.1		+0.1	ppm	V <sub>s</sub> ± 5%	
vs. load change	- 0.1		+0.1	ppm	Load ± 10%	
vs. aging /15 Years	- 2.5		+2.5	ppm	*Stratum 3 per GR-1244-CORE:	
overall tolerance	-4.6		-4.6	ppm	<±4.6 ppm for all causes and 15 years aging, Holdover: <±0.37 ppm over 24 hours (Code: D287 & B287)	

## Supply voltage (Vs)

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code <sup>5</sup>
Supply voltage [Standard]	3.135	3.3	3.465	VDC		SV033
Supply voltage [Option]	4.75	5	5.25	VDC		SV050
Current consumption			15	mA	steady state @ +25°C & 3.3VDC	
			15	mA	steady state @ +25°C & 5.0VDC	

## RF output

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code <sup>5</sup>
Signal [Standard]	HCMOS					RFH
Load	13.5	15	16.5	pF		
Rise and Fall time			5	ns	10% - 90%	
Duty cycle	40		50	%	@ (Voh-Vol)/2	
Signal [Standard]	sinewave					RFS
Load		50		Ohm		
Output power	0	3	6	dBm		
Harmonics			-30	dBc		
Sub harmonics			-30	dBc		If applicable

## Additional parameters

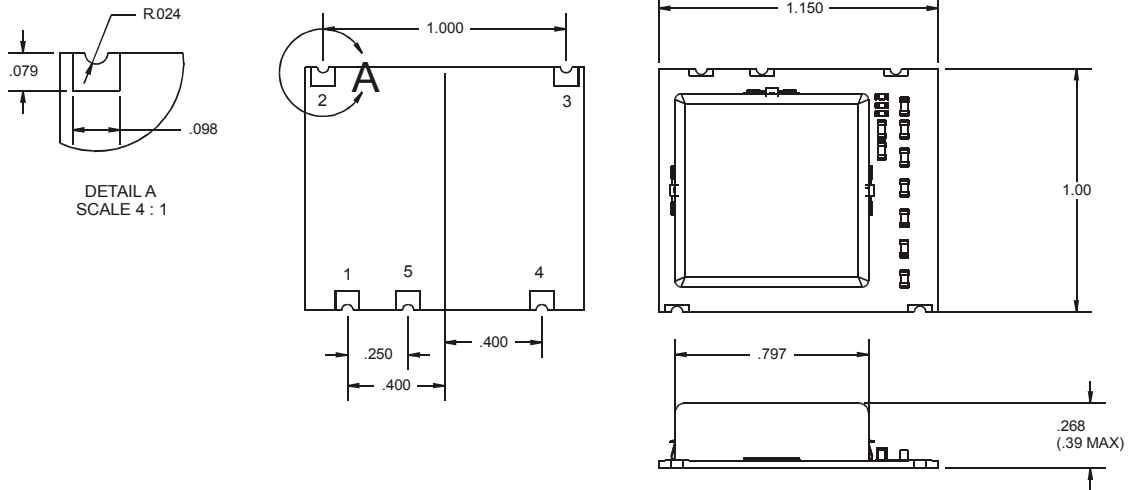
Parameter	Min	Typ	Max.	Units	Condition	
Phase Noise <sup>3</sup>		-115		dBc/Hz	100 Hz	Stratum 3 TCXO @ 12.8 MHz
		-130		dBc/Hz	1 kHz	
		-140		dBc/Hz	10 kHz	
Allan Variance		1x 10 <sup>-9</sup>			Tau= 1 sec	
Weight			9	g		
Processing & Packing	Handling & processing note					

## Enclosures

### Type A

Package Codes:

Code A1	Height "H" 6.8	Pin Length "L" NA
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Dimensions: inches

#### Pin Connections

- 1 RF-Output
- 2 Vs (supply voltage)
- 3 GND
- 4 N.C./EFC
- 5 GND

Outline Drawing:

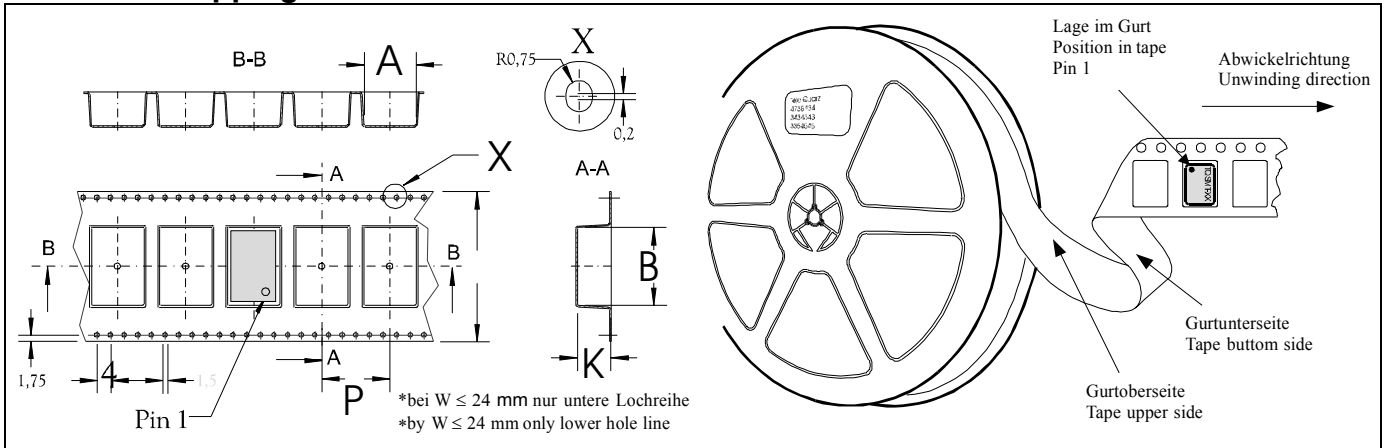
#### Marking

C2560Ax-xxxx  
 Frequency  
 \* C AYYWW

## Absolute Maximum Ratings

Parameter	Min	Typ	Max.	Units	Condition
Supply voltage (Vs)			6.0	V	
Control Voltage	0		6.0	V	
Maximum output load @ CMOS			40	pF	
Operable temperature range	-40		+85	°C	
Storage temperature range	-55		+125	°C	

## Standard Shipping Method



Lage im Gurt  
Position in tape  
Pin 1

Abwickelrichtung  
Unwinding direction

Gurtunterseite  
Tape bottom side

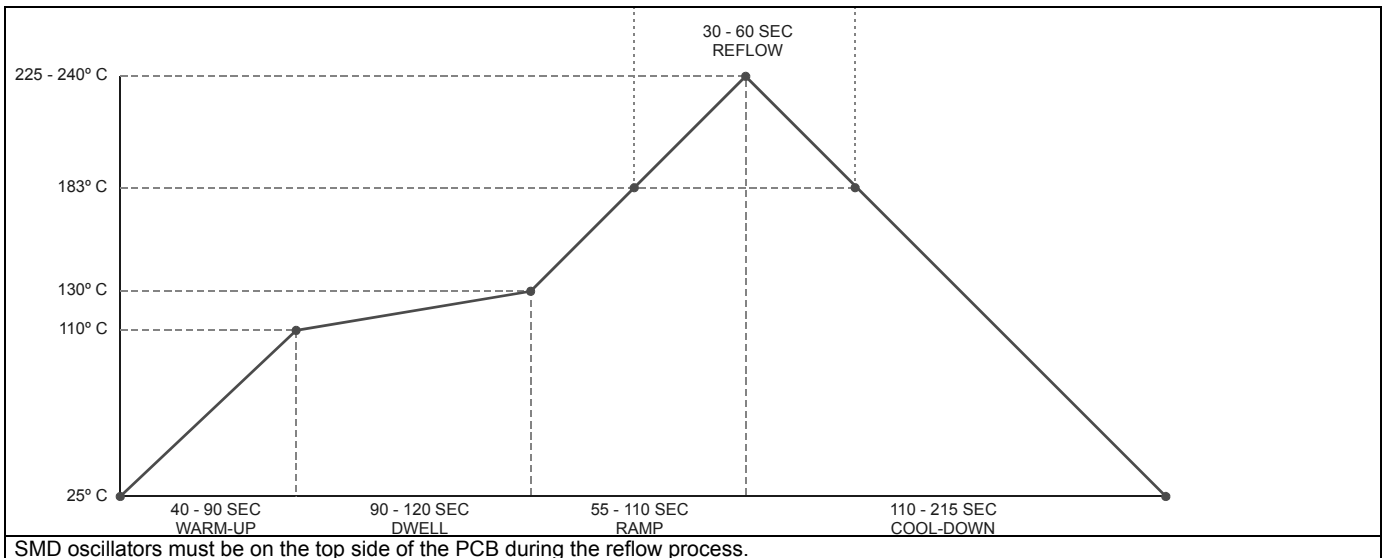
Gurtoberseite  
Tape upper side

\*bei  $W \leq 24$  mm nur untere Lochreihe  
\*by  $W \leq 24$  mm only lower hole line

Production tolerance complying DIN IEC 286-3

Enclosure Type	Tape width W [mm]	Quantity per meter	Quantity per reel	Dimension P

## Recommended Reflow Profile



## How to Order this Product:

Step 1	Use this worksheet to forward the following information to your factory representative:					
	Model	Stability Code	Supply Voltage Code	RF Output Code	Package Code	Frequency
	C2560					
<i>Example:</i>	C2560	D206	SV033	RFH	A1	12.800 MHz

Step 2	The factory representative will then respond with a Vectron Model Number in the following Configuration:			
	Model	Package Code	Dash	Dash Number
	C2560	[Customer Specified Package Code]	-	[Factory Generated 4 digit number]
<i>Typical P/N = C2560A1-0001</i>				

### Notes:

- 1 Contact factory for improved stabilities or additional product options. Not all options and codes are available at all frequencies.
- 2 Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C)
- 3 Phase noise degrades with increasing output frequency.
- 4 Subject to technical modification.
- 5 Contact factory for availability.