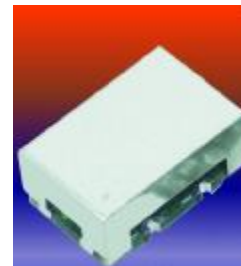


Typical Applications

2, 5, 10 Gbit/s standard
 Sonet / SDH

Features

Surface Mount Package
 Reflow Process Compatible
 SAW-based Oscillator



Previous Vectron Model Numbers

Frequency range

622,08 to 669,3265 MHz

Standard frequencies

622,08; 624,629; 644,5313; 666,5143; 669,3265 MHz

Frequency stabilities¹

Parameter	Min	Typ	Max.	Units	Operating temp range	Ordering Code ⁵
vs. operating temperature range (Referenced to +25°C)	-300.0		+50.0	ppm	-40 ... +85°C	

Supply voltage

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code ⁵
Supply voltage (Vs)	4.75	5.0	5.25	VDC		SV050
Current consumption			120	mA		
Supply voltage (Vs)	3.135	3.3	3.465	VDC		SV033
Current consumption			80	mA		

RF output

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code ⁵
Signal		PECL				RFP
Load		50		Ω	Vs - 2V	
Rise and Fall time			400	ps	20 to 80 %	
Duty cycle	45		55	%		

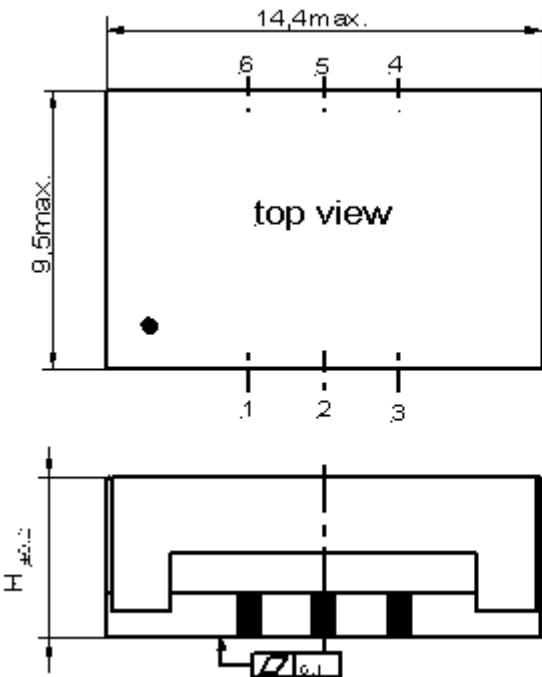
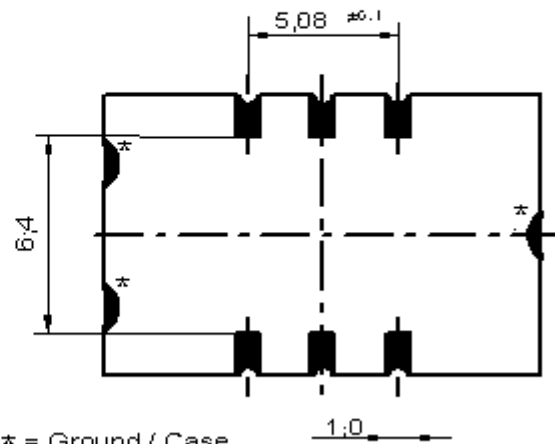
Frequency Tuning (EFC)

Parameter	Min	Typ	Max.	Units	Condition
Tuning Range		±350.0		ppm	
Absolute Pulling Range (APR)	50			ppm	
Linearity		3	10	%	
Tuning Slope		Positive			
Control Voltage Range	0.0	1.65	3.3	VDC	with Vs=3.3VDC

Additional parameters

Parameter	Min	Typ	Max.	Units	Condition
Phase Noise		-40		dBc/Hz	10 Hz @ 622 MHz
		-70		dBc/Hz	100 Hz PECL
		-90		dBc/Hz	1 kHz 3,3V
		-120		dBc/Hz	10 kHz
		-140		dBc/Hz	100 kHz
		-147		dBc/Hz	1 MHz
Jitter		0,073	1	Ps RMS	@ 12 kHz to 20 MHz
Weight			2	g	
Processing & Packing	handling&processing note				

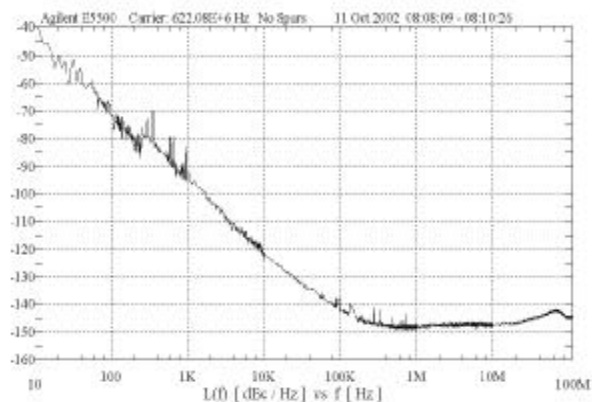
Type G183

Code A1	Height "H" 5,9	Pin Length "L" NA												
 top view G183 H = 5,3 : G 183 H = 4,5 : G 183 A H = 5,9 : G 183 B  * = Ground / Case Dimensions: mm														
Pin Connections 1 Control Voltage (Vc) 2 N/C / Enable (optional) 3 Ground (Case) 4 RF Output 5 Complementary RF Output 6 Supply Voltage Input (Vs) Outline Drawing: G183B		true table <table border="1"> <tr> <td>Enable Pin 2</td><td>Output Pin 4</td><td>Complementary output Pin 5</td></tr> <tr> <td>Low</td><td>Data</td><td>compl. Data</td></tr> <tr> <td>Open</td><td>Data</td><td>compl. Data</td></tr> <tr> <td>High</td><td>No Data</td><td>No Data</td></tr> </table>	Enable Pin 2	Output Pin 4	Complementary output Pin 5	Low	Data	compl. Data	Open	Data	compl. Data	High	No Data	No Data
Enable Pin 2	Output Pin 4	Complementary output Pin 5												
Low	Data	compl. Data												
Open	Data	compl. Data												
High	No Data	No Data												
Marking C AYYWW C5315A1-xxxx frequency														

Absolute Maximum Ratings

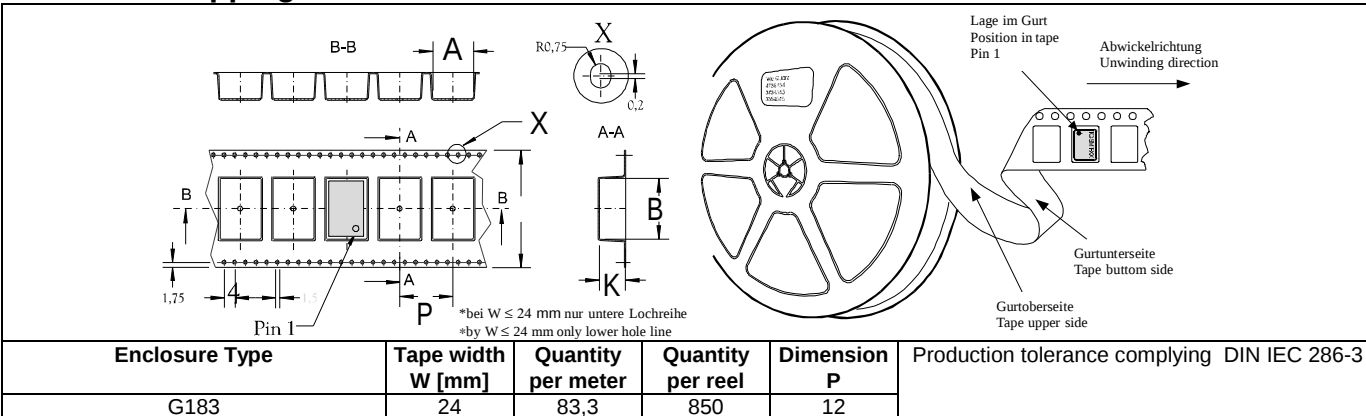
Parameter	Min	Typ	Max.	Units	Condition
Supply voltage (Vs)			7	V	
Operable temperature range	-40		+85	°C	
Storage temperature range	-40		+90	°C	

Typical Phase Noise and Jitter (PECL output)

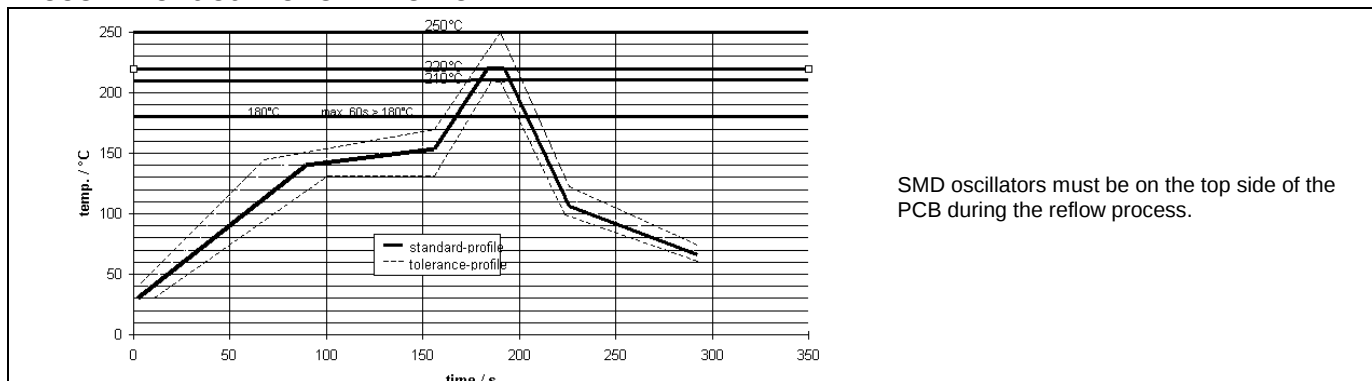


Frequency range [Hz]	S _φ (f) [dB]	Jitter [ps rms]
1000Hz to 5MHz	-62.78dB	0.186ps
250kHz to 5MHz	-77.78dB	0.033ps
12kHz to 20MHz	-70.88dB	0.073ps

Standard Shipping Method



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
C5315				

Example: C5315

SV033

RFP

A1

Step 2 The factory representative will then respond with a Vectron Model Number in the following Configuration:			
Model	Package Code	Dash	Dash Number
C5315	[Customer Specified Package Code]	-	[Factory Generated 4 digit number]

Typical P/N = C5315A1-0001

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.