

### Typical Applications

PCS Base Stations  
 Land Mobile Radio  
 Cellular Telephony  
 Radio in the Local Loop

### Features

EFC Standard  
 Standard Surface Mount Package  
 Small Size  
 Low Profile



### Frequency range

6.4 MHz – 52 MHz

### Standard frequencies

12.8; 19.44; 20MHz, 20.48MHz

### Frequency stabilities<sup>1</sup>

Parameter	Min	Typ	Max.	Units	Operating temp range	Ordering Code <sup>5</sup>
vs. operating temperature range (Referenced to +25°C)	-2.5		+2.5	ppm	-20 ... +70°C	D256
	-1.0		+1.0	ppm	-20 ... +70°C	D106
	-1.0		+1.0	ppm	0 ... +50°C	B106
	-0.5		+0.5	ppm	0 ... +50°C	B507
Parameter	Min	Typ	Max.	Units	Condition	
Initial tolerance	- 2.5		+2.5	ppm	at time of shipment, nominal EFC V <sub>s</sub> ± 5% Load ± 10%	
vs. supply voltage change	- 0.5		+0.5	ppm		
vs. load change	- 0.2		+0.2	ppm		
vs aging /1. Year	- 1.0		+1.0	ppm		

### 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	-20 ... +70°C	D807
	-0.28		+0.28	ppm	0 ... +50°C	B287
	-0.28		+0.28	ppm	-20 ... +70°C	D287
	-0.80		+0.80	ppm	-40 ... +85°C	F807
	-0.28		+0.28	ppm	-30 ... +85°C	G287
Parameter	Min	Typ	Max.	Units	Condition	
Initial tolerance	- 1.0		+1.0	ppm	at time of shipment, nominal EFC V <sub>s</sub> ± 5% Load ± 10%	
vs. supply voltage change	- 0.2		+0.2	ppm		
vs. load change	- 0.1		+0.1	ppm		
vs aging /15 Years	- 2.5		+2.5	ppm		
overall tolerance	-4.6		-4.6	ppm	*Stratum 3 per GR-1244-CORE: <±4.6 ppm for all causes and 20 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
Current consumption			6	mA	steady state @ +25°C	

### RF output

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code <sup>5</sup>
Signal [Standard]		clipped Sinewave			> 12.288MHz	RFC
Load R	9	10	11	kΩ	@ 10kΩ   10pF	
C	9	10	11	pF		
Output power	0.7			V <sub>pp</sub>		

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code <sup>5</sup>
Signal [Standard]	HCMOS					RFH
Load	13.5	15	16.5	pF	with Vs=3.3V and 15pF load with Vs=3.3V and 15pF load  @ (Voh-Vol)/2	
Signal Level (Vol)			0.3	VDC		
Signal Level (Voh)	3.0			VDC		
Rise and Fall time			5	ns		
Duty cycle	40	50	60	%		

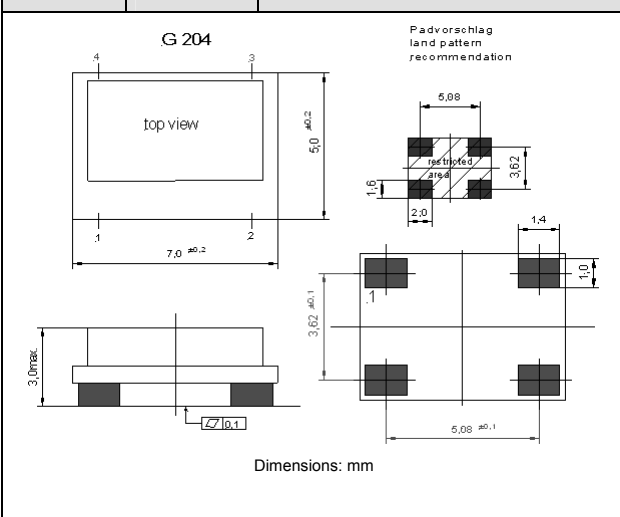
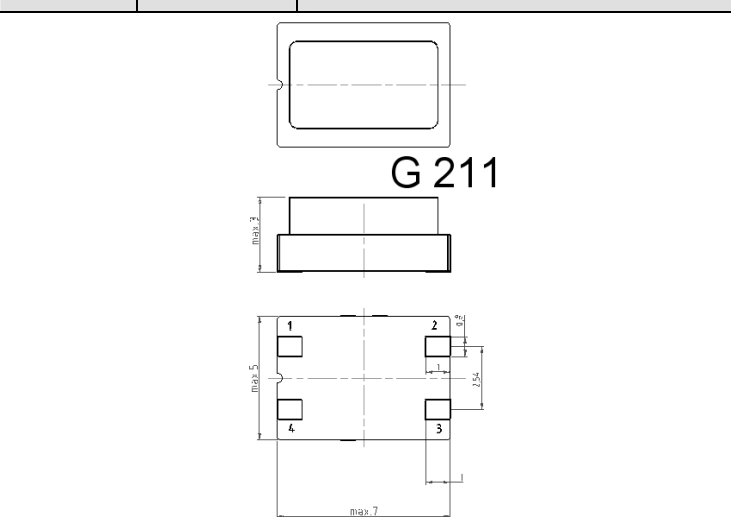
### Frequency Tuning (EFC)

Parameter	Min	Typ	Max.	Units	Condition
Tuning Range	± 8.0	±14.0	± 20.0	ppm	
Linearity			10	%	
Tuning Slope	Positive				
Control Voltage Range	0.3	1.65	3.0	VDC	with Vs=3.3VDC
Freq. control input impedance	10			kΩ	

### Additional parameters

Parameter	Min	Typ	Max.	Units	Condition
Phase Noise <sup>3</sup>		-90		dBc/Hz	10 Hz @19.44MHz
		-120		dBc/Hz	100 Hz
		-135		dBc/Hz	1 kHz
		-140		dBc/Hz	10 kHz
		-145		dBc/Hz	100 kHz
Weight			2	g	
Processing & Packing	Handling & processing note				

### Enclosures

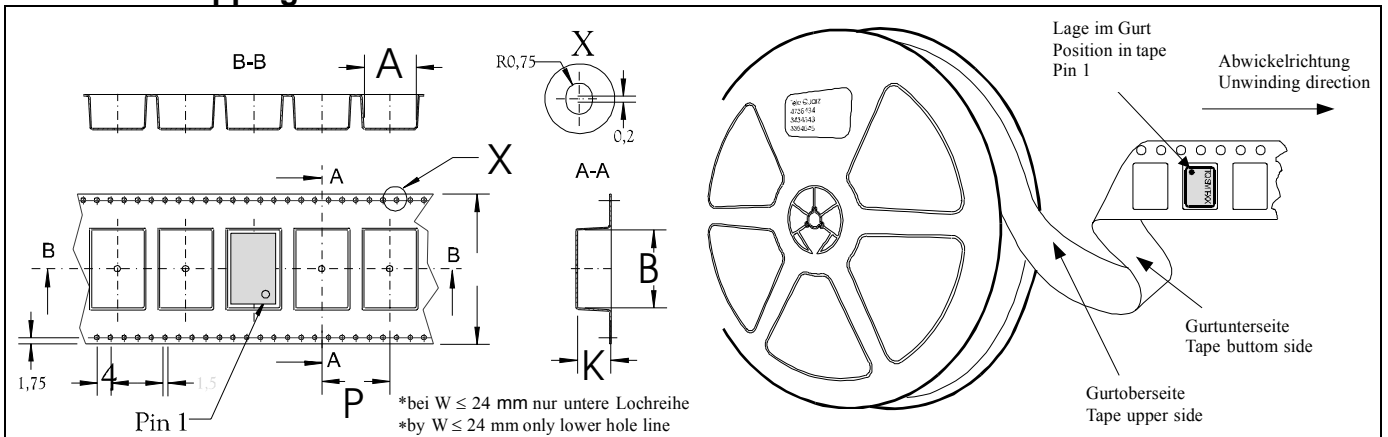
Type G204			Type G211		
Package Codes:			Package Codes:		
Code A1	Height "H" 3.0	Pin Length "L" NA	Code B1	Height "H"	
 <p>Dimensions: mm</p>			 <p>Dimensions: mm</p>		

Pin Connections	
1	Voltage Control (Vc)
2	Ground (Case)
3	RF output
4	Supply Voltage Input (Vs)
Outline Drawing: G204	
Marking	
C2260-xxxx frequency * C AYYWW	

## Absolute Maximum Ratings

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

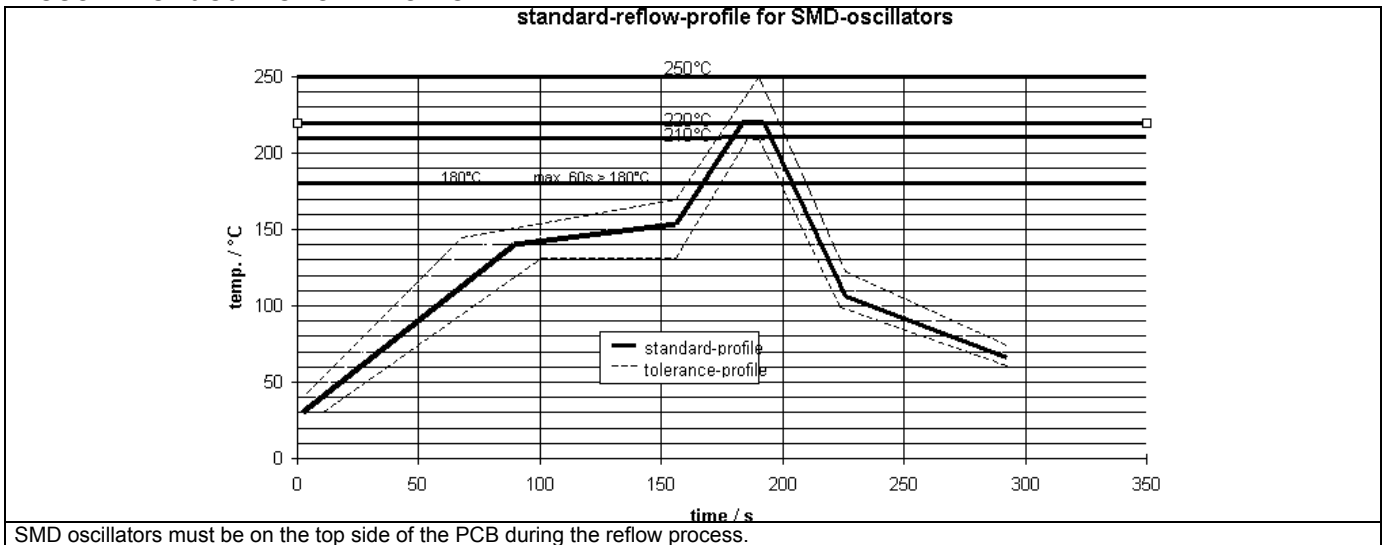
## Standard Shipping Method



Production tolerance complying DIN IEC 286-3

Enclosure Type	Tape width W [mm]	Quantity per meter	Quantity per reel	Dimension P
G204 /G211	Tbd.	Tbd.	Tbd.	Tbd.

## 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
C2260					
<i>Example: C2260</i>	<i>D106</i>	<i>SV033</i>	<i>RFC</i>	<i>A1</i>	<i>12.8MHz</i>

Step 2 The factory representative will then respond with a Vectron Model Number in the following Configuration:			
Model	Package Code	Dash	Dash Number
C2260	[Customer Specified Package Code]	-	[Factory Generated 4 digit number]

Typical P/N = C2260A1-0001

### 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.