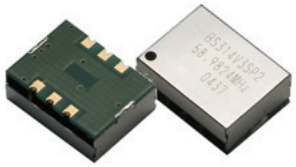
SP2HV HCSL SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

FEATURES

- SMD package with metal lid
- Excellent Phase Noise
- High Speed Current Steering Logic
- Applications: SONET, xDSL, SDH, Media box, ...

14.3 x 8.7 x 5.5 mm



Item	Specification		
Frequency Range	25 MHz ~ 200 MHz (in case higher frequency needed, please contact us)		
Output Logic	HCSL		
Overall Frequency Stability *	± 20 ppm ~ ± 100 ppm (see options)		
Operating Temperature Range	0 ~ +70°C commercial application (see options) -40 ~ +85°C industrial application (see options)		
Supply Voltage Vdd	+2.5 V ±5%	+2.8 V ±5%	+3.3 V ±5%
Control Voltage Center	+1.25 V	+1.4 V	+1.65 V
Control Voltage Range	0.25 V to 2.25 V	0.0 V to 2.8 V	0.0 V to 3.3 V
Supply Current Idd	25 mA typ. ~ 100 mA typ.		
Output Voltage HIGH VOH	660 mV min. ; 740 mV typ. ; 850 mV max.		
Output Voltage LOW VOL	-150 mV min. ; 0 mV typ. ; 150 mV max.		
Output Load	100 ohm between output and complementary output		
Symmetry	45 / 55 %		
Rise Time / Fall Time Fr / Ff	340 ps typ.		
Tri-state Function	pin #1 or pin #2 = high or open pin #1 or pin #2 = low	pin #4 - pin#5 ==> oscillation pin #4 - pin#5 ==> high impedance	
Start-up Time	3 ms typ. ; 10 ms max.		
Integrated Phase Jitter (12 kHz to 20 MHz band)	200 fs typ.		
Frequency Pulling Range	±50 ppm min. ; ±100 ppm min. (See options)		
Linearity	6% typical ; 10% max.		
Slope Polarity	Positive (Increasing control voltage always increases output frequency)		
Modulation Bandwidth	10 kHz min. (-3 dB)		
Input Impedance	1 MΩ min.		
Packing Unit	800pcs / reel		
Soldering Condition	260°C , 10 sec x2 max		
	Customer specifications on request		

(*) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging

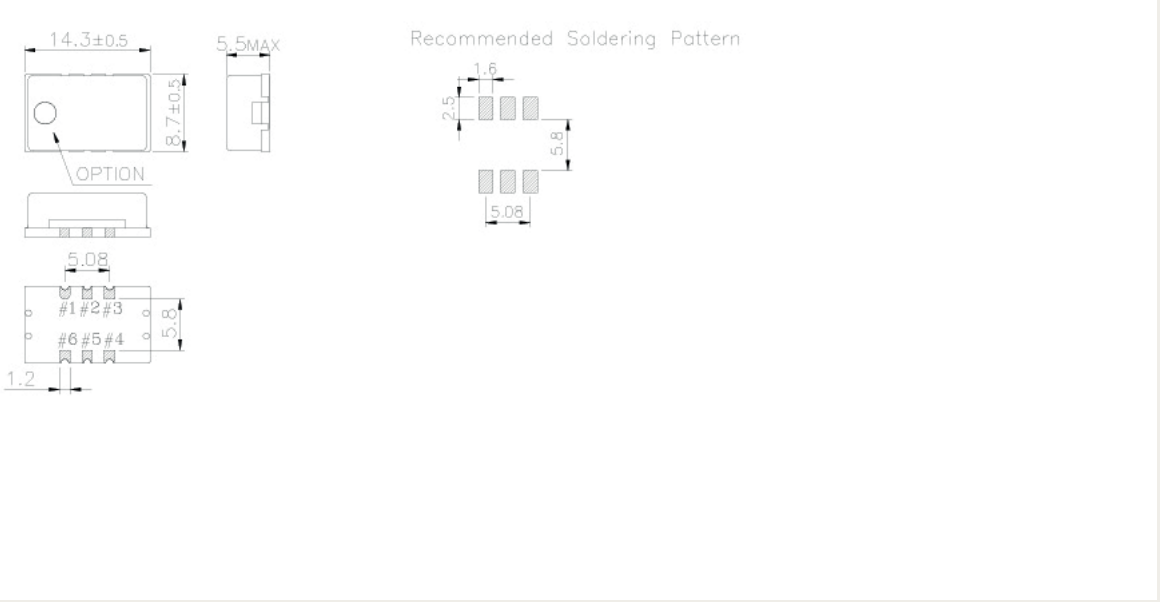
OPTIONS & ORDERING INFORMATION

SP2HV

.....	.....	.....	.....	.....	..... -	..... MHz
Supply Voltage	Operating Temp. *	Overall Stability *	Tri-state Function	Package type	Pulling *	Frequency in MHz
25 = +2.5 V	**C =** 0° / +50°C	**20 =** ±20 ppm	**E1 =** Tri-state , pin #1	**6P =** 6-pad	**50 =** ±50 ppm min.	Please specify the
28 = +2.8 V	**D =** -10° / +60°C	**25 =** ±25 ppm	**E2 =** Tri-state , pin #2	version	**100 =** ±100 ppm min.	frequency in MHz
33 = +3.3 V	**E =** 0° / +70°C	**30 =** ±30 ppm				
	F = -20° / +70°C	**50 =** ±50 ppm				
	G = -30° / +75°C	**100 =** ±100 ppm				
	H = -30° / +85°C					
	K = -40° / +85°C					

(*) Note : Not all combinations are possible, please consult us.

OUTLINE DIMENSIONS



Pin Connections			
	#1 : E/D or Control Voltage	**#2** : E/D or Control Voltage	**#3**: GND
	#4 : Output	**#5** : Complementary Output	**#6**: Vdd