2.5V / 3.3Vdc PROGRAMMABLE SPREAD SPECTRUM LOW EMI CLOCK OSCILLATOR





7.0 x 5.0 x 1.4mm

RoHS / RoHS II Compliant

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable

FEATURES:

- Spread Spectrum LOW EMI Oscillator
- 7.0 x 5.0 x 1.4mm Ceramic package

ASSVP SERIES

- Tri-state function
- Suitable for RoHS reflow profile
- Seam sealed ceramic package assures high reliability.

> APPLICATIONS:

- Laptop computer
- PDA
- Mobile phone • LCD • Printer

• Wireless LAN

• Digital camera • Flat TV Quick Turn Delivery! Days for small quantities!

> STANDARD SPECIFICATIONS:

Koy Floatrical Specifications (Die ICle Down

Para							
	Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range:			10		160	MHz	
Spread Spectrum Type Dov		Center Spread	$\pm 0.25 \text{ typ.} \sim \pm 2.0 \text{ typ.}$ -0.5 typ. \sim -4.0 typ.		%	See table 3 for options	
		Down Spread			p.	70	See table 3 for options
EMI Reduction		100MHz at C02	-7				
(Reduction is appl		1001/11/2 41 002	,			dBc	Refer to the dB level
the entire frequency		100MHz at C04	-9				when no modulation.
	spectrum) Operating Temperature:		-40		+85	°C	See options
Storage Temperatu			-40 -55		+125	°C	See options
Overall Frequency		t*·	-50		+50		See options
Supply Voltage		$V_{\rm dd} = 3.3 \text{V}$	2.97	3.3	3.63	ppm V	Standard
(Vdd):		$V_{\rm dd} = 3.5 \text{ V}$ $V_{\rm dd} = 2.5 \text{ V}$	2.25	2.5	2.75	V	Option 1
(vuu).		0 to 49.999MHz	2.23	10	2.73	v	Орион 1
				15	20	1	
	50.000 to 79.999MHz 80.000 to 99.999MHz			20	25	mA	$V_{dd} = 2.5V$
				25	30	1	
Input Current:	100.0 to 160.0MHz			15	20	mA	$V_{dd} = 3.3V$
	13.000 to 49.999MHz			20	25		
	50.000 to 79.999MHz			25	30		
	80.000 to 99.999MHz			30	40		
Symmetry: 100.0 to 160.0MHz		45	50	55	%	@ 1/2Vdd CI =15pE	
Symmetry.	13.000 to 49.999MHz		43	2.0	5.0	ns	$@ 1/2Vdd, CL=15pF$ $V_{dd} = 2.5V$
	50.000 to 79.999MHz			2.0	4.0		
	80.000 to 99.999MHz			1.5	3.0		
Rise and Fall	100.0 to 160.0MHz			1.5	3.0		
Time (Tr/Tf)**:	13.000 to 49.999MHz			3.0	10.0	ns	$V_{dd} = 3.3V$
Time (11/11) .	50.000 to 79.999MHz			2.5	8.0		
	80.000 to 99.999MHz			2.0	5.0		
	100.0 to 160.0MHz			1.5	4.0		
Output Load:			1.5	15	рF	CMOS	
Output Voltage: VOH VOL		VOH	0.9*Vdd		13	V	Cirios
			0.9 V dd		0.1*Vdd	V	
Start-up Time:				2.0	10.0	ms	
Tri-state function (Stand-by):			"1" (VIH>0.7*Vdd) or Open: Oscillation "0" (VIH<0.3*Vdd) : Hi Z				
Modulation carrier frequency (Dither rate)			Programmable dependant (30kHz to 40kHz)				
Aging:			-3.0		+3.0	ppm	@+25°C First year

^{*} Frequency stability includes initial tolerance, temperature characteristics, load variation, and supply voltage variation,





2.5V / 3.3Vdc PROGRAMMABLE SPREAD SPECTRUM LOW EMI CLOCK OSCILLATOR









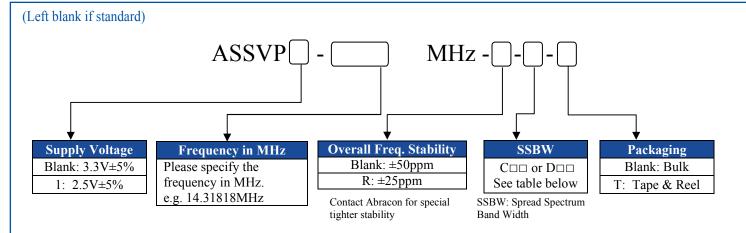


Table: SPREAD SPECTRUM BANDWIDTH SELECTION TABLE

SPREAD SPECTRUM BAND WIDTH OPTIONS *						
Cente	r Spread (%)	Down Spread (%)				
C02	±0.250	D02	-0.50			
C04	±0.50	D03	-0.75			
C08	±1.000	D04	-1.00			
C12	±1.500	D06	-1.50			
C16	±2.000	D08	-2.00			
		D12	-3.00			
		D16	-4.00			

Note *: All spectrum spread percentage numbers are typical values





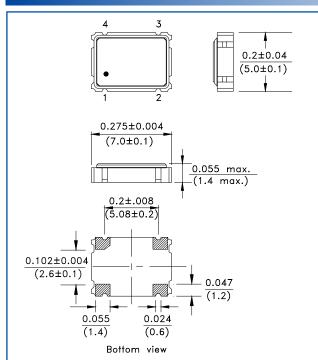
2.5V / 3.3Vdc PROGRAMMABLE SPREAD SPECTRUM LOW EMI CLOCK OSCILLATOR

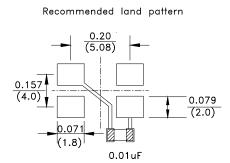
ASSVP SERIES





OUTLINE DRAWING:





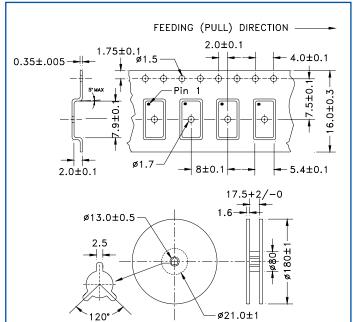
Note: Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

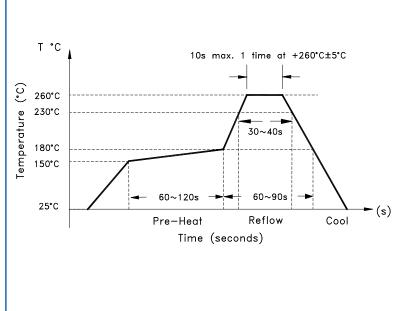
Pin	Function
1	Tri-State
2	GND/Case
3	Output
4	Vdd

Dimensions: Inches (mm)

TAPE & REEL: Tape and reel 1,000pcs/reel

REFLOW PROFILE







Need a test socket for the ASSVP Series? To view compatible PRECISION TEST and BURN-IN SOCKETS for these parts, click here.

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ABRACON:

ASSVP1-FREQ-C16 ASSVP1-FREQ-C12 ASSVP-FREQ-R-C16 ASSVP-FREQ-R-C12 ASSVP1-FREQ-D02

ASSVP1-FREQ-D04 ASSVP-FREQ-D04 ASSVP-FREQ-D08 ASSVP1-FREQ-D03 ASSVP-FREQ-D16 ASSVP1-FREQ-D16 ASSVP1-FREQ-D16 ASSVP1-FREQ-D16 ASSVP1-FREQ-R-C04 ASSVP1-FREQ-R-C04 ASSVP1-FREQ-R-C04 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D06 ASSVP1-FREQ-R-D07 ASSVP1-FREQ-R-C16 ASSVP1-FREQ-R-C16 ASSVP1-FREQ-R-C16 ASSVP1-FREQ-R-C16 ASSVP1-FREQ-R-D08 ASSVP1-FREQ-R-D08 ASSVP1-FREQ-R-D08 ASSVP1-FREQ-R-D08 ASSVP1-FREQ-R-D08 ASSVP1-FREQ-R-D08 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D09 ASSVP1-FREQ-R-D16 AS