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





**ESD** Sensitive



RoHS / RoHS II Compliant



5.0 x 3.2 x 1.3 mm

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

#### **FEATURES:**

- Spread Spectrum LOW EMI Oscillator
- 5.0 x 3.2 x 1.3mm Ceramic package
- Tri-state function
- Suitable for RoHS reflow profile
- Seam sealed ceramic package assures high reliability.

#### > APPLICATIONS:

- Laptop computer
- PDA
- LCD
- Digital camera
- Wireless LAN
- Mobile phone
- Printer
- Flat TV

Quick Turn Delivery! <5 Days for small quantities!

### **STANDARD SPECIFICATIONS:**

**Key Electrical Specifications (Die IC's Part Number PL671-00-A5)** 

	Parameters			Typical	Maximum	Units	Notes
Frequency Range:			8		160	MHz	
Spread Spectrum Type Center Spread Down Spread		$\pm 0.25 \text{ typ.} \sim \pm 2.0 \text{ typ.}$				G (11 2 G (	
		Down Spread	$-0.5 \text{ typ.} \sim -4.0 \text{ typ.}$			%	See table 3 for options
EMI Reduction (Reduction is applied to		100MHz at C02	-7			dBc	Refer to the dB level when no modulation.
the entire frequency spectrum)		100MHz at C04	-9				
Operating Temperature:		-40		+85	°C		
Storage Temperature:			-55		+125	°C	
Overall Frequency Stability*:		-50		+50	ppm	See options	
		$V_{\rm dd} = 3.3 \mathrm{V}$	2.97	3.3	3.63	V	Standard
(Vdd):	7	$V_{\rm dd} = 2.5 \mathrm{V}$	2.25	2.5	2.75	V	Option 1
	8.000	to 49.999MHz		10	20		
	50.000 to 79.999MHz			15	20		V - 2.5V
	80.000	to 99.999MHz		20	25	mA	$V_{dd} = 2.5V$
Input Current:	100.0	0 to 160.0MHz		25	30		
input Current.	8.000 to 49.999MHz			15	20	mA	$V_{dd} = 3.3V$
	50.000 to 79.999MHz			20	25		
	80.000 to 99.999MHz			25	30		
	100.0	to 160.0MHz		30	40	<u></u>	
Symmetry:		45	50	55	%	@ 1/2Vdd, CL=15pF	
	8.000 to 49.999MHz			2.0	5.0	ns	$V_{dd} = 2.5V$
	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)**:	8.000 to 49.999MHz			3.0	10.0		$V_{dd} = 3.3V$
	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:				15	pF	CMOS	
Outnut Valtagas		VOH	0.9*Vdd			V	
Output Voltage:		VOL			0.1*Vdd	V	
Start-up Time:			2.0	10	ms		
Tri-state function (Stand-by):		"1" (VIH\ge 0.7*Vdd) or Open: Oscillation "0" (VIH\le 0.3*Vdd) : Hi Z					
Modulation carrier frequency (Dither rate)			Programmable dependant (15kHz to 120kHz)				
Aging:	Aging:				+3.0	ppm	@+25°C First year

<sup>\*</sup> Frequency stability includes initial tolerance, temperature characteristics, load variation, and supply voltage variation,.





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

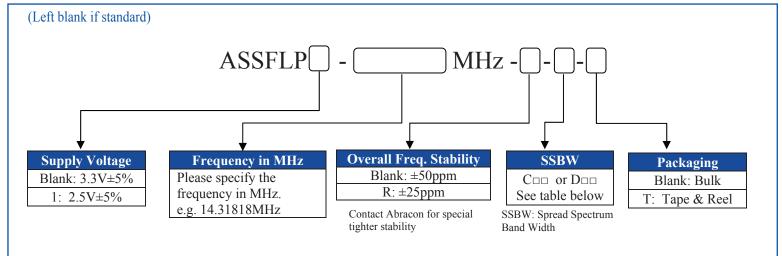






5.0 x 3.2 x 1.3 mm

## > OPTIONS & PART IDENTIFICATION:



#### 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

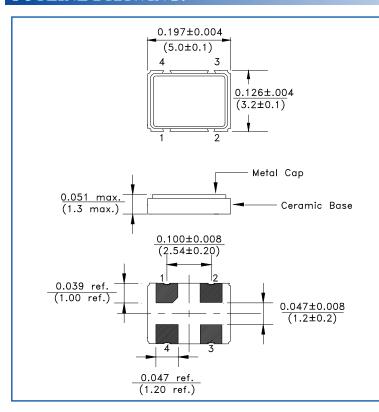
ASSFLP SERIES

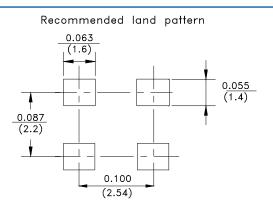




5.0 x 3.2 x 1.3 mm

### **OUTLINE DRAWING:**





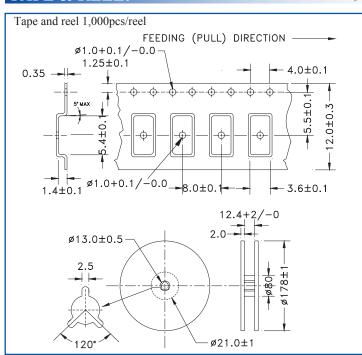
Note: Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

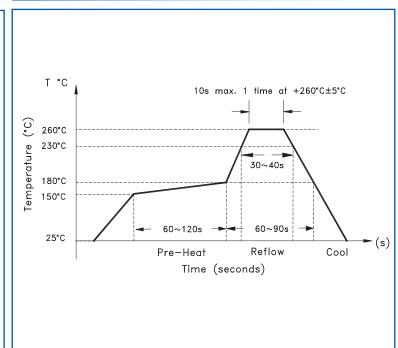
Pin	Function
1	Tri-State
2	GND/Case
3	Output
4	Vdd

**Dimensions: Inches (mm)** 

# **► TAPE & REEL:**

### REFLOW PROFILE







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

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.





# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Programmable Oscillators category:

Click to view products by ABRACON manufacturer:

Other Similar products are found below:

8N4Q001LG-0102CDI 8N4Q001LG-0139CDI DSC8101AL2 8N0Q001BH-2202CDI DSC8101DI5 DSC8121AI5 EP16E7E2H26.000MTR

SIT8102AI-13-18E-25.00000T 8N4Q001LG-1033CDI DSC8121CL5T DS1090U-2/V+T DS1090U-32+T DSC8121AM2 DSC8001AL2

DSC8101BL2 DSC8121CI1 DSC8124CI5 DSC8003CI2T DSC8102DI2 DSC8124CI2 DSC8123CI5 DSC8124BI2 DSC8122BI5

DSC8101DI2 DSC8121CL5 SiT8008AI-71-XXX-000.FP000G SG-8002JA 20.000M-PTMB-ROHS ECS-P143-10-AN 570FCC001204DG

570FCC000169DG 544BAEB002025CBG 544BAHB002172BBGR 544BAHB002157BBGR DS1077LU-40+T SiT3808AI-D2-XXXX
000.FP000X DS1090U-1+T DS1086Z+T&R DS1087LU-447+T 544BCAA000112BBG DS1086LU+T 564BACA001478ABG SG-8002CA

2.4576M-PCBB 564BACA000121ABG 564BACA001478BBG 564BABA002053ABG 564BAAA000121ABG 564BAAC000115BBG

564BAAD000115BBG ECS-P8F3X-1.000-AN 570CBC000306DG