

1. Device Name VC-TCXO
2. Model Name DSA321SDM
3. Nominal Frequency 16.320 MHz
4. Mass 0.02g max.
5. Absolute Maximum Ratings

	Item	Symbol	Rating	unit
1	Supply Voltage	V <sub>CC</sub>	-0.3~+6.0	V
2	Storage Temperature Range	T <sub>STG</sub>	-40~+85	°C

#### 6. Recommended Operating Conditions

	Item	Symbol	min.	typ.	max.	unit
1	Supply Voltage	V <sub>CC</sub>	+3.135	+3.3	+3.465	V
2	Load Impedance (resistance part) (parallel capacitance)	LOAD_R	9	10	11	kΩ
		LOAD_C	9	10	11	pF
3	Control Voltage Range	V <sub>CONT</sub>	+0.5	+1.5	+2.5	V
4	Operating Temperature Range	T <sub>OPR</sub>	-30	-	+85	°C

#### 7. Electrical Characteristics

(T<sub>A</sub>=-30~+85°C, LOAD\_R//C=10kΩ//10pF, V<sub>CC</sub>=+3.3V, V<sub>CONT</sub>=+1.5V, unless otherwise noted)

	Item	Conditions	Limits			unit	Notes
			min.	typ.	max.		
1	Current Consumption		-	-	+1.5	mA	
2	Output Level		0.8	-	-	V <sub>P-P</sub>	1
3	Symmetry	GND level (DC cut)	40/60	-	60/40	%	
4	Frequency Stability						
	1.Tolerance	After 2 times reflow Ref. to Nominal Frequency	-	-	±1.5	ppm	2
	2.vs Temperature	T <sub>A</sub> =-30~+85°C Ref. to Frequency (T <sub>A</sub> =+25°C)	-	-	±0.5	ppm	
	3.vs Supply Voltage	V <sub>CC</sub> =+3.3V±5%	-	-	±0.2	ppm	
	4.vs Load Variation	LOAD_R//C=(10kΩ//10pF)±10%	-	-	±0.2	ppm	
	5.vs Aging	T <sub>A</sub> =Room ambient	-	-	±1.0	ppm/year	
5	Start Up Time	@90% of final V <sub>out</sub> level	-	-	2.0	ms	
6	Frequency Control						
	1.Control Range	V <sub>CONT</sub> =+0.5V~+2.5V(Ref +1.5V)	±3	-	±5	ppm	3
	2.Input Resistance		500	-	-	kΩ	
7	SSB Phase Noise	Relative to f <sub>0</sub> level offset 1kHz	-	-	-130	dBc/Hz	

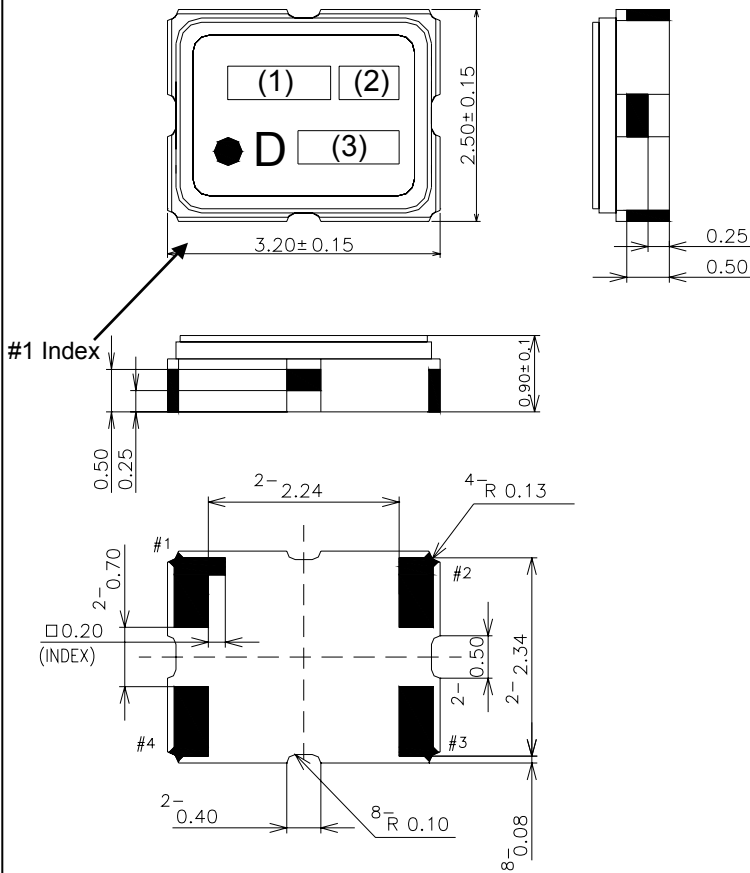
#### Notes

1. Clipped sine wave (DC-coupled)
2. Please leave after reflow in 2h or more at room ambient.
3. Positive slope (Frequency becomes high in proportion to frequency control voltage.)

TITLE DSA321SDM TYPE SPECIFICATION		Remark		
Date 2013/12/18	Spec. No. 1XTV16320JAA	Rev. -	Page 1/2	

## 8. Outline, Pin Connections

### Outline



### Pin Connections

Pin No.	Connection
#1	$V_{CONT}$
#2	GND
#3	Output
#4	$V_{CC}$

### Marking

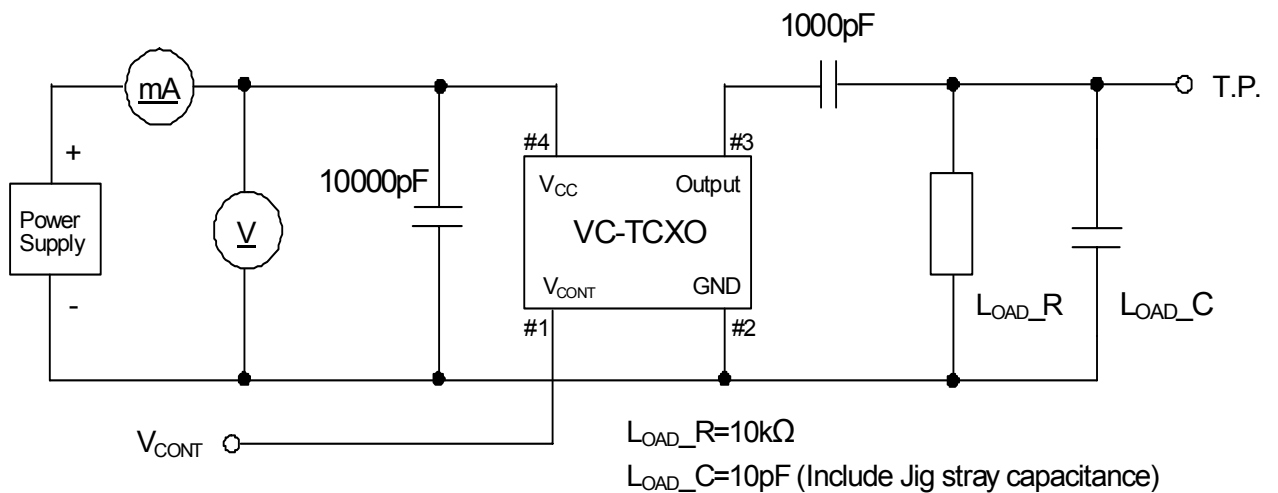
(1) Frequency	16.32 (MHz, 4digits)
(2) Model code	AD
(3) Logo	D
(4) Date code	Year (1digit) +Week (2digits) e.g.2012/1/1 → 201

unit: mm

Dimensional Tolerance:  $\pm 0.15$

(Unless otherwise noted)

## 9. Measurement Circuit



TITLE  
DSA321SDM TYPE SPECIFICATION

Remark

Date  
2013/12/18

Spec. No.  
1XTV16320JAA

Rev.  
-

Page  
2/2

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Standard Clock Oscillators](#) category:*

*Click to view products by [KDS](#) manufacturer:*

Other Similar products are found below :

[601252](#) [F335-25](#) [F535L-33.333](#) [F535L-50](#) [ASV-20.000MHZ-LR-T](#) [ECS-2018-160-BN-TR](#) [MXO45HS-2C-66.6666MHZ](#) [SiT1602BI-22-33E-50.000000E](#) [SiT8209AI-32-33E-125.000000](#) [SIT8918AA-11-33S-50.000000G](#) [SM4420TEV-40.0M-T1K](#) [SMA4306-TL-H](#) [F335-24](#) [F335-40](#) [F535L-10](#) [F535L-12](#) [F535L-16](#) [F535L-24](#) [F535L-27](#) [F535L-48](#) [PE7744DW-100.0M](#) [ASF1-3.686MHZ-N-K-S](#) [ASV-4.000MHZ-LCS-T](#) [XLH735025.000JU4I8](#) [XLP725125.000JU6I8](#) [XO57CTECNA3M6864](#) [ECS-2100A-147.4](#) [601251](#) [EP16E7E2H26.000MTR](#) [SiT8503AI-18-33E-0.200000X](#) [SIT8918AA-11-33S-16.000000G](#) [SIT9122AI2C233E300.000000X](#) [XO37CTECNA20M](#) [XO3003](#) [9120AC-2D2-33E212.500000](#) [9102AI-243N25E100.00000](#) [8208AC-82-18E-25.00000](#) [ASDK2-32.768KHZ-LR-T3](#) [8008AI-72-XXE-24.545454E](#) [8004AC-13-33E-133.33000X](#) [AS-4.9152-16-SMD-TR](#) [ASFL1-48.000MHZ-LC-T](#) [632L3I004M00000](#) [SIT8920AM-31-33E-25.0000](#) [DSC1028DI2-019.2000](#) [9121AC-2C3-25E100.00000](#) [9102AI-233N33E100.00000X](#) [9102AI-233N25E200.00000](#) [9102AI-232H25S125.00000](#) [9102AI-133N25E200.00000](#)