

1. Device Name VC-TCXO
2. Model Name DSA535SC
3. Nominal Frequency 15.600 MHz
4. Mass 0.08g max.
5. Absolute Maximum Ratings

	Item	Symbol	Rating	unit
1	Supply Voltage	V _{CC}	-0.3 ~ +6.0	V
2	Storage Temperature Range	T _{STR}	-40 ~ +85	°C

6. Recommended Operating Conditions

	Item	Symbol	min.	typ.	max.	unit
1	Supply Voltage	V _{CC}	+4.75	+5.0	+5.25	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 _{CONT}	+0.5	+1.5	+2.5	V
4	Operable Temperature Range	T _{OPR}	-30	-	+85	°C

7. Electrical Characteristics

(T_A = -30 ~ +85 °C, LOAD_R//C = 10kΩ//10pF, V_{CC} = +5.0V, V_{CONT} = +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 _{P-P}	1
3	Symmetry	GND level (DC cut)	40/60	-	60/40	%	
4	Harmonics		-	-	-10	dBc	
5	Frequency Stability 1. Tolerance	At shipping	-	-	±1.5	ppm	2
		After 2 times reflow	-	-	±2.5	ppm	2,3
	2. vs Temperature	T _A = -30 ~ +85 °C Ref. to Frequency (T _A = +25 °C)	-	-	±2.5	ppm	
	3. vs Supply Voltage	V _{CC} = +5.0V ±5%	-	-	±0.3	ppm	
	4. vs Load Variation	LOAD_R//C = (10kΩ//10pF) ±10%	-	-	±0.2	ppm	
	5. vs. Aging	T _A = Room ambient	-	-	±1.0	ppm/year	
6	Start up Time	@90% of Final V _{OUT} level	-	-	2.0	ms	
7	Frequency Control 1. Control Range	V _{CONT} = +0.5 ~ +2.5V (Ref: +1.5V)	±9	-	±15	ppm	4
		2. Input Resistance	500	-	-	kΩ	
8	SSB Phase Noise	Relative to F0 level offset 1kHz	-	-	-125	dBc/Hz	

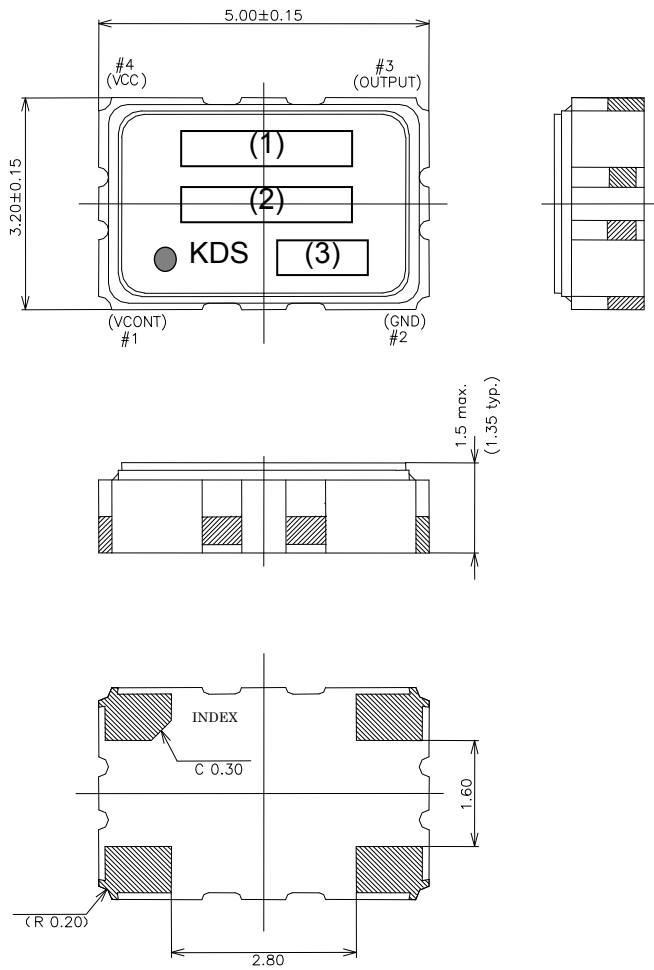
Notes

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

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8. Outline, Pin Connections

Outline



Pin Connections

Pin No.	Connection
#1	V _{CONT}
#2	GND
#3	Output
#4	V _{CC}

Marking

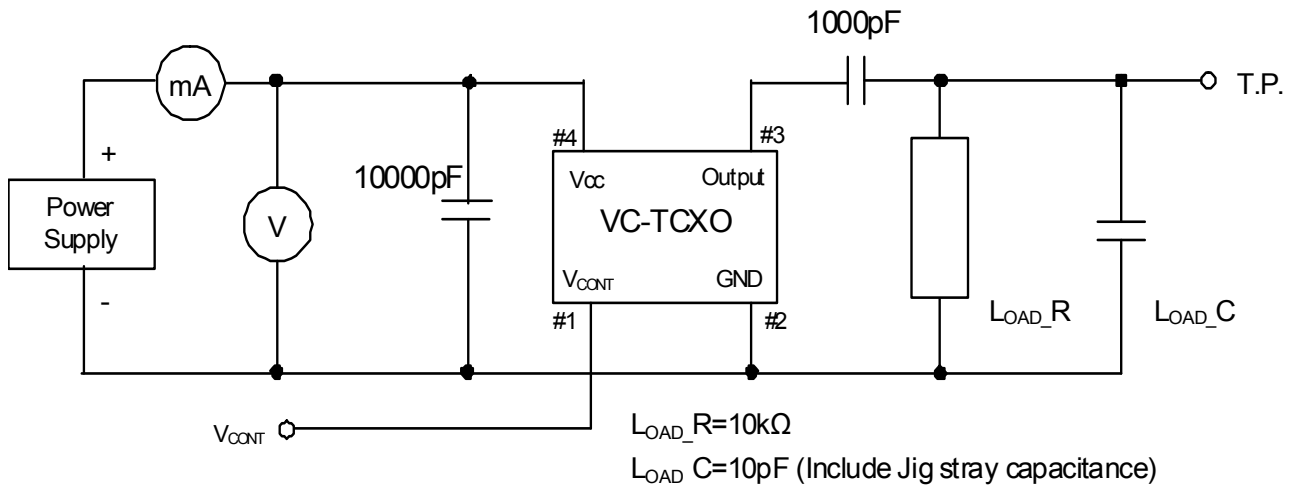
(1) Frequency	15600 (kHz, 5digits)
(2) Model code	A535SC
(3) Date code	Year (1digit) + Week (2digits) e.g.2016/1/1 → 601

unit: mm

Dimensional Tolerance: ±0.15

(Unless otherwise noted)

9. Measurement Circuit



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