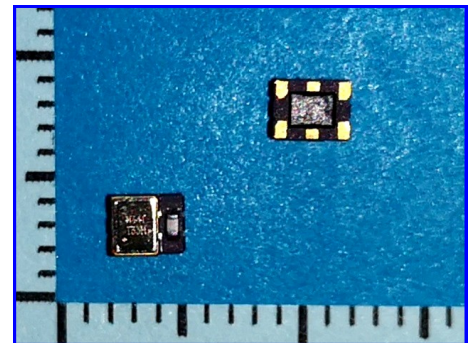


VOLTAGE CONTROLLED & TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR UNIT WITH LVCMOS OUTPUT IN CERAMIC SEAM SEAL SMD PACKAGE, SIZE 3.2 X 2.5MM.

### SVTP3\_H



#### PRODUCT FEATURES

- VCTCXO IN SMALL SMD PACKAGE SIZE 3.2 X 2.5 X 1.6MM WITH 6 PADS.
- CONFIGURABLE IN A WIDE FREQUENCY RANGE.
- LOW INTEGRATED PHASE JITTER 1.5PS RMS TYPICAL.

#### APPLICATIONS

- WIRELESS AND GPS
- TEST AND MEDICAL EQUIPMENT
- HIGH ACCURACY SIGNAL GENERATION
- RADIO SIGNALS

#### PRODUCT SPECIFICATIONS

PARAMETER	SYMBOL	PARAMETER VALUES / LIMITS	CONDITIONS / REMARKS
NOMINAL FREQUENCY	$F_N$	<b>10 ~ 245MHZ</b>	—
SUPPLY VOLTAGE RANGE	$V_{DD}$	2.5V OR 3.3V	—
SUPPLY CURRENT CONSUMPTION	$I_{DD}$	25 ~ 40mA	NOTE 1
INITIAL CALIBRATION TOLERANCE	$\Delta f/F_N$	$\pm 1.0$ PPM	@+25°C
OVERALL FREQUENCY STABILITY	$\Delta f/F_N$	$\pm 2.5$ PPM	DEFAULT, OTHERS PLEASE SEND REQUEST
OPERATING TEMPERATURE RANGE	$T_{OP}$	-40°C ~ +85°C	DEFAULT, OTHERS PLEASE SEND REQUEST
AGING PER YEAR	$(\Delta f/F_N)_Y$	$\pm 1$ PPM	@+25°C
CONTROL VOLTAGE RANGE (PIN 1)	$V_C$	1.5 $\pm$ 1.0V <sub>DC</sub>	FOR BOTH $V_{DD} = 2.5V$ AND 3.3V
FREQUENCY PULLING RANGE	$\Delta f/V_C$	$\pm 8.0$ PPM MIN	POSITIVE SLOPE
OUTPUT WAVEFORM / LOAD	— / $C_L$	LVCMOS / 15PF	TYPICAL MOST COMMON, OTHERS AVAILABLE
OUTPUT VOLTAGE LEVELS	$V_{OH}/V_{OL}$	$\geq 90\%V_{DD}$ / $\leq 10\%V_{DD}$	—
RISE AND FALL TIMES	$t_R$ AND $t_F$	1.5ns TYP; 3.0ns MAX	@10%~90%~10% $V_{DD}$
OUTPUT SYMMETRY (DUTY CYCLE)	DC	50 $\pm$ 5%	@50% $V_{DD}$
INTEGRATED PHASE JITTER RMS	$J_{RMS}$	1.5ps TYP / <400fs	@1KHZ~20MHZ / 2MHZ~20MHZ
STANDBY FUNCTION (ENABLE/DISABLE ON PIN 2)	E/D	PIN2 = HIGH OR OPEN -> OUTPUT ACTIVE PIN2 = LOW -> OUTPUT HIGH IMPEDANCE	• OUTPUT HIGH IMPEDANCE = TRI-STATE • PIN2 CAN BE LEFT OPEN = FLOATING
STANDBY CURRENT CONSUMPTION	$I_{STB}$	18mA	TYPICAL

NOTE 1: CURRENT CONSUMPTION VARIES WITHIN THIS RANGE DEPENDING ON FREQUENCY AND SUPPLY VOLTAGE.

#### MECHANICAL DIMENSIONS

**RECOMMENDED LAND PATTERN**

\* Open connection (floating) of this input is prohibited, connect it to Vdd if not used.

PAD	FUNCTION
1	CONTROL VOLTAGE [Vc]
2	ENABLE / DISABLE [E/D] *
3	GROUND [GND]
4	OUTPUT
5	COMPLEMENTARY OUTPUT or N.C. for HCMOS output type
6	SUPPLY VOLTAGE [Vdd]

Ceramic seam seal VCTCXO package 3.2x2.5mm with 6 pads  
**CVT32P-P6** 2018-12 A  
 No scale Unit: mm

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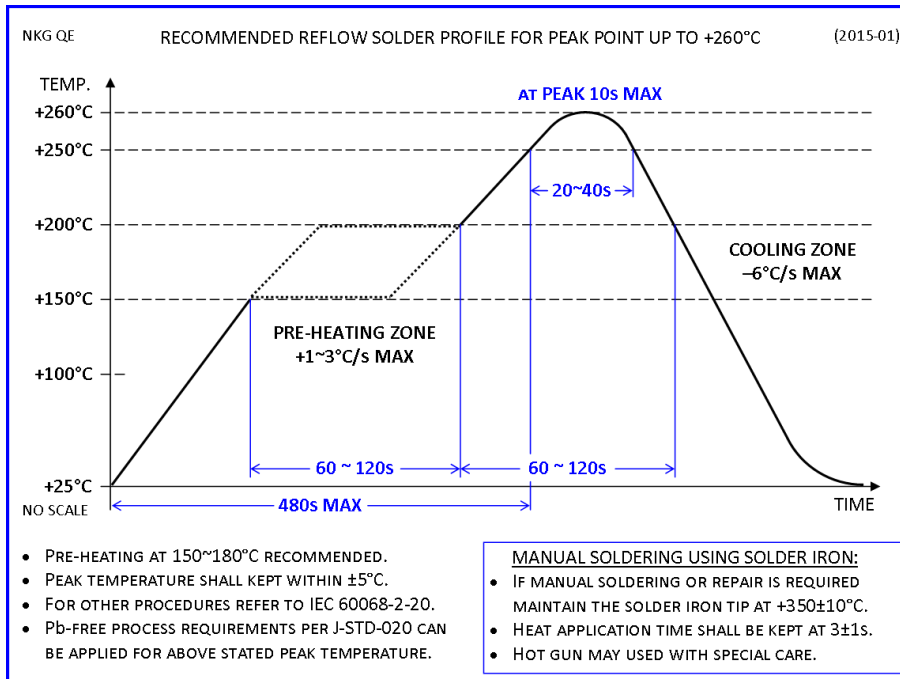
# SVTP3\_H

### ENVIRONMENTAL COMPLIANCE INFORMATION

- ROHS 6/6 COMPLIANT (DIRECTIVE 2011/65/EC) AND LEAD-FREE.
- COMPLIANT TO ROHS 2 (DIRECTIVE 2015/863) (ALSO CALLED ROHS 10).
- HALOGEN-FREE PER DEFINITION OF IEC 61249-2-21 2033.
- NONE-USE OF SVHCS PER REACH IS CURRENTLY GIVEN, CONTINUOUSLY MONITORED AND UPDATED AS THE COMMISSION ISSUES NEW RELEASES.
- PRODUCT DOES NOT CONTAIN ANY PHTHALATES (PHS).
- PRODUCT DOES NOT CONTAIN PVC (POLYVINYL CHLORIDE).
- PRODUCT DOES NOT CONTAIN PFOS/PFOA NOR BEING SAME USED TO MANUFACTURE THE COMPONENTS OF THIS PRODUCT.
- MOISTURE SENSITIVITY LEVEL (MSL) 1 PER J-STD-020C.

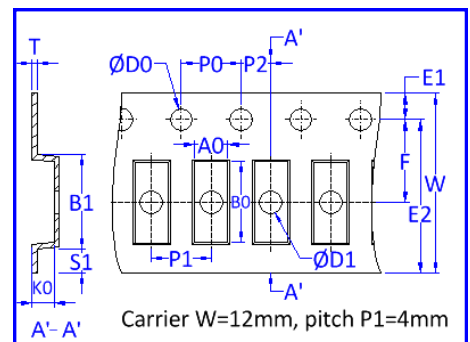


### SOLDERING RECOMMENDATIONS



### PACKAGING INFORMATION

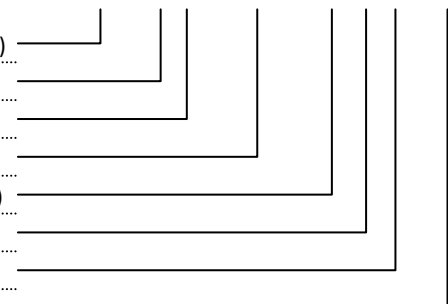
- PACKAGING IN TAPE & REEL IN COMPLIANCE TO EIA-481.
- QTY PER REEL: 3,000PCS
- REEL DIA A=180MM.
- EMBOSSED CARRIER TAPE WIDTH W = 12MM.
- COMPONENT PITCH P1 = 4MM.



### PART NUMBER SYNTAX

- PART NUMBER FAMILY (REPRESENTS PRODUCT MODEL W/ CMOS OUTPUT AND PACKAGE SIZE)
- SUPPLY VOLTAGE NOMINATOR (CODE 6= 3.3V, 9= 2.5V)
- FREQUENCY STABILITY CODE (I.E. Q=±2.5PPM, R=±2.0PPM, U=±1.5PPM, V=±1.0PPM)
- NOMINAL FREQUENCY (IN MHZ WITH AT LEAST THREE DIGITS AFTER DECIMAL POINT)
- OPERATING TEMPERATURE RANGE CODE (I.E. E= -20~70°C, V= -30~85°C, W= -40~85°C)
- OUTPUT WAVEFORM INDICATOR (H= HCMOS / LVCMOS)
- FREQUENCY PULLING MINIMUM VALUE (NUMERICAL VALUE)
- PART NUMBER EXTENSION (ONLY FOR NON-STANDARD OR CUSTOMIZED PARTS)

SVTP3 6 Q 25.000 W H 8 -EXT



IF THERE IS A LARGE NUMBER OF CODES IN USE THE TABLE ABOVE MAY ONLY SHOW A FEW EXAMPLES.

FOR MORE INFORMATION PLEASE CONTACT US.

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