(VC)TCXO
SBTO - 29

HCMOS

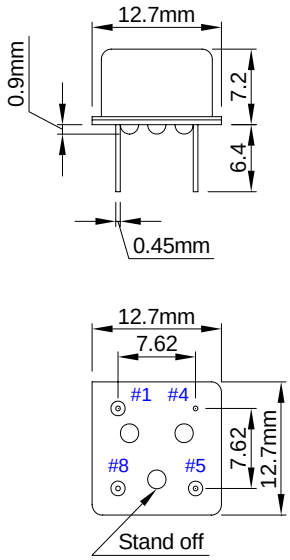
8 PIN DIP PACKAGE

PICTURE AREA

APPLICATIONS

- ►Ultra stabile frequency
- ►FEMTO - CELL
- ►Wi-Bro / 3G(CDMA, W-CDMA)
- ►GPRS / GSM

OUTLINE DIMENSIONS



Pin no.	Function
#1(1)	V control or no connection
#4(2)	GND
#5(3)	Frequency output
#8(4)	VCC

ELECTRICAL SPECIFICATIONS

Frequency range	10.000MHz to 52.000MHz
Frequency stability	±0.25 ±0.5 ±1.0 ±1.5 ±2.0 ±2.5 **Inclusive of operating temperature range. Units:PPM max.*
Operating temperature range	See below
Storage temperature range	–40 °C ~ 85 °C
Input voltage	+3.3Vdc ±0.15V to +5.0Vdc ±0.5V
Input current	5mA max.(10 to 30MHz), 10mA max. (31 to 52MHz)
Output wave form	HCMOS
Load	15pF
Symmetry	45/55% or 55/45% min.
Output high voltage (V_{OH})	+2.7V min.
Output low voltage (V_{OL})	+0.3V max.
Rising time (Tr)	5nS max. (at 10% to 90% Vdc)
Falling time (Tf)	5nS max. (at 90% to 100% Vdc)
Input voltage stability	±0.2ppm max. (at +3.3Vdc ±0.15V)
Input load stability	±0.2ppm max. (at 15pF ±2pF)
Aging (at 25 °C)	±1.0ppm max. / year
AFC characteristic	±10ppm typical (at +1.5Vdc ±1.0V)
Polarity & Linearity	Positive slope / 10% max.

ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Shock	MIL-STD-883C, Method 2002, Condition B
Vibration	MIL-STD-883C, Method 2007, Condition A
Solder ability	MIL-STD-883C, Method 2003

PART NUMBERING GUIDE

S B T O 29 D B V

SBtron

(VC)TCXO

Model No.

AFC option
T = TCXO
V = VCTCXO

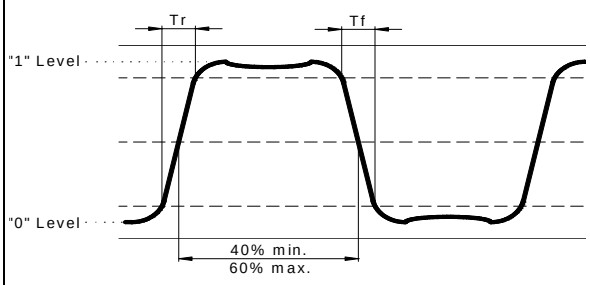
Frequency stability
A = ± 0.25 ppm(depending on temp. range & frequency)
B = ± 0.5 ppm (depending on temp. range & frequency)
C = ± 1.0 ppm E = ± 2.0 ppm,
D = ± 1.5 ppm F = ± 2.5 ppm,
G = Customize

Temperature range
A = –20 °C ~ 70 °C
B = –25 °C ~ 75 °C
C = –30 °C ~ 80 °C
D = –40 °C ~ 85 °C
E = Customize

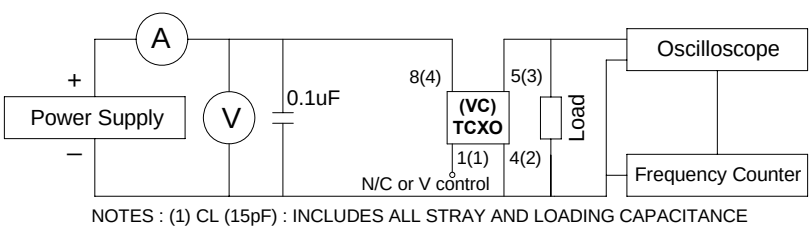
Standard specifications for product indicated in BLUE character

Specifications subjects to change without notice & If you need other specifications, Contact our factory.

WAVE FORM



TEST CIRCUIT



NOTES : (1) CL (15pF) : INCLUDES ALL STRAY AND LOADING CAPACITANCE

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