

TCXO-31 VC-TCXO

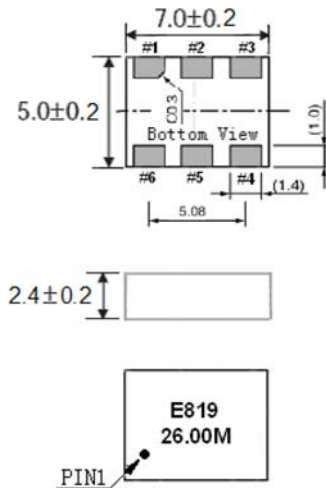
HCMOS
SMD PACKAGE

APPLICATIONS

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

PICTURE
AREA

OUTLINE DIMENSIONS



Pin no.	Function
#1, #2	N/C
#3	GND
#4	Frequency output
#5	N/C
#6	VCC

ELECTRICAL SPECIFICATIONS

Frequency range	10.000000MHz ~40.000
Frequency stability	± 1.0 ppm max. (at 25 °C) <i>Refer to the table of stability selection & coding</i>
Operating temperature range	0 °C ~ 70 °C / -20°C ~70°C / -40 °C ~ 85 °C / -55 °C ~ 85 °C
Storage temperature range	-55 °C ~ 125 °C
Input voltage	+3.3Vdc ±0.15V to +5.0Vdc ±0.5V, 9V
Input current	3mA~15mA
Output wave form	HCMOS / TTL / LVTTTL
Load	15pF
Symmetry (@50%)	45/55% or 55/45% Typical
Output high voltage (V _{OH})	+2.7V min.
Output low voltage (V _{OL})	+0.4V max.
Rising time (Tr)	7nS max. (at 10% to 90% Vdc)
Falling time (Tf)	8nS 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)	±0.5ppm max. / year
Polarity & Linearity	Positive slope / 10% max. VC-TCXO
Pulling range	±5ppm~±8ppm @+1.65V VC-TCXO

Phase Noise(Typical @ 10.000MHz)

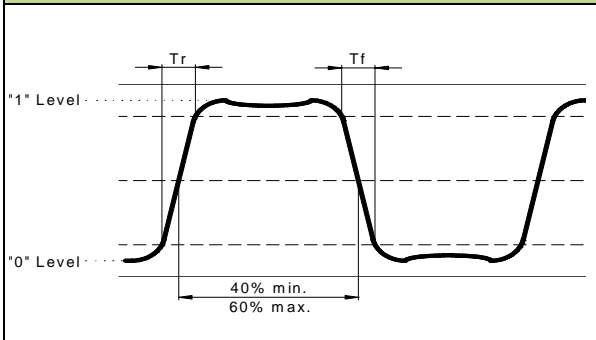
.10Hz	-90dBc/Hz	.10KHz	-142dBc/Hz
.100Hz	-115dBc/Hz	.10Hz	-145dBc/Hz
1KHz	-135dBc/Hz		

PART NUMBERING GUIDE

Temperature °C	Stability	Day-aging	Year-aging	Stability vs Voltage	Stability vs Load	Code
0~70	0.05PPM	0.02PPM	1PPM	0.02PPM	0.02PPM	A
0~70	0.1PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	B
0~70	0.28PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	C
-20~70	0.05PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	D
-20~70	0.1PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	E
-20~70	0.28PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	F
-40~85	0.05PPM	0.01PPM	0.5PPM	0.05PPM	0.05PPM	G
-40~85	0.28PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	H
-40~85	0.5PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	I
-40~85	0.5PPM	0.02PPM	1PPM	0.05PPM	0.05PPM	J
-55~85	0.5PPM	0.01PPM	0.5PPM	0.1PPM	0.1PPM	K
-55~85	1PPM	0.01PPM	0.5PPM	0.1PPM	0.1PPM	L
-55~85	2PPM	0.02PPM	1PPM	0.1PPM	0.1PPM	M

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

WAVE FORM



TEST CIRCUIT

