

STE01 HCMOS / TTL TCXO/ VCTCXO

- Stability: From ± 1.0 ppm
- Accuracy: Mechanical frequency adjustment
- Aging: 1.0ppm



Characteristics

Frequency Range (MHz)	1.2 ~ 44.545
Supply voltage $\pm 5\%$ Vcc (V _{DC})	3.3, 5.0
Operating temperature Top (°C)	Table 1
Operating Current (mA max)	20 (3.3 Vcc), 25 (5.0 Vcc)
Stability v T op (ppm)	Table 1
Stability v Vcc (ppm)	± 0.3 max (5%)
Stability v Load (ppm)	± 0.3 max (10%)
Aging @25°C (ppm)	± 1.0 / yr
Tolerance @ 25°C (ppm)	Mechanical adjustment
Load $\pm 10\%$	15pF / 10TTL
Output voltage (V) HCMOS	VOL 0.1xVcc max, VOH 0.9Vcc min
TTL	VOL 0.4V max, VOH 0.9V min
Duty Cycle (%)	60/40 (45/55 option)
Rise & Fall times (ns, max)	5 (3.3V Vcc), 4 (5.0V Vcc)
Mechanical trimmer (ppm)	± 3 min
VCTCXO only	
Slope / Linearity	Positive / 4% typ 5% max
Control voltage (V _{DC})	1.65 $\pm$ 1.65 (3.3V), 2.5 $\pm$ 2.0 (5.0V)
Frequency Tuning (ppm)	5, 10

Rating

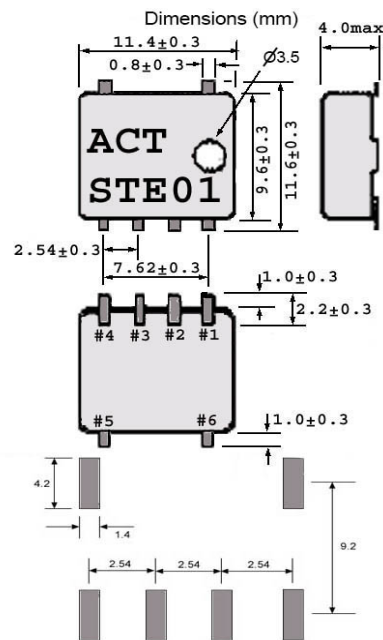
Storage temperature (°C) -40 ~ +85

Notes:

ESD sensitive, take appropriate precautions.

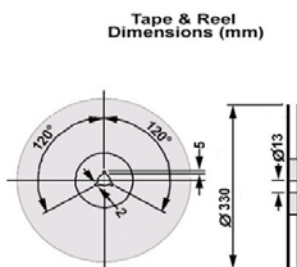
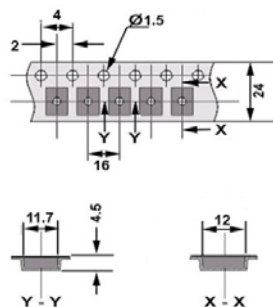
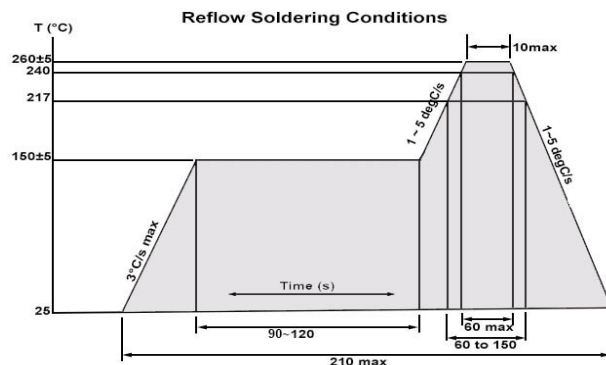
Table 1

Temp	Frequency Stability v Temperature								
	± 1.0	± 1.5	± 2.0	± 2.5	± 3.0	± 3.5	± 4.0	± 4.5	± 5.0
0 ~ 50°C	✓	✓	✓	✓	✓	✓	✓	✓	✓
-10 ~ 60°C		✓	✓	✓	✓	✓	✓	✓	✓
-10 ~ 70°C		✓	✓	✓	✓	✓	✓	✓	✓
-20 ~ 70°C			✓	✓	✓	✓	✓	✓	✓
-30 ~ 60°C				✓	✓	✓	✓	✓	✓
-30 ~ 70°C				✓	✓	✓	✓	✓	✓
-30 ~ 75°C				✓	✓	✓	✓	✓	✓
-40 ~ 80°C					✓	✓	✓	✓	✓
-40 ~ 85°C					✓	✓	✓	✓	✓



Land Pattern

Pin	connection
#1	Vdd
#2	NC (TCXO) V Control (VCTCXO)
#3	Ground
#4	Output
#5	Ground
#6	Ground



Please note that all parameters can not necessarily be specified in the same device.
 To specify: Please refer to part numbering system appended to the end of this data
 ISO9001 Registered

For quotations or further information please contact us at:
 3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY
 Issue No. 9 Skr Date:

09/10/2013

STE01 HCMOS / TTL TCXO/ VCTCXO

VCTCXO PART NUMBERING

VT23	2700	P	B	D	E	E	B	D	P	K	S	B	-PF
STE01	27.00MHz	±1 ppm	3.3 V _{DC}	0+50 °C	cntl only		3	± ppm	Pos	± %	40/60 %	500	RoHS

STE01	VT23
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Stability V T _{OP} ±ppm	
1	P
1.5	O
2	N
2.5	M
3	L
3.5	K
4	J
5	F

T _{OP} °C	
0+50	D
0+60	P
0+70	E
-10+60	F
-10+70	C
-20+70	B
-30+70	T
-30+75	W
-40+80	K
-40+85	I

Electrical Tuning ±ppm	
5	D
10	F
Others Enquire	

Polarity	
Positive	P

Linearity ±%	
5	K

Duty Cycle % / %	
40/60	S
45/55	H

Tape & Reel	
500	B
Loose	L

V _{CC} V _{DC}	
3.3	B
5	A

Frequency tuning	
Vcntl only	E
Mech+Vcntl	B

Output	
HCMOS	E
TTL	H
Universal	J
TTL/HCMOS	

Mechanical Tuning ±ppm	
3	B
None	X

Frequency:

Please enquire if the frequency/stability combination has been developed.
For part numbering use the first 4 characters of the frequency in Hz i.e. 27MHz = 27000000Hz so the code used in the part number is 2700. If the frequency is 100MHz or higher then the first 5 characters are used.
It is important to suffix the part number

Example

VT23 - 2700PBDEEBDPKSB-PF 27.00MHz

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STE01 HCMOS / TTL TCXO/ VCTCXO

TCXO PART NUMBERING

T23	2700	P	B	D	I	E	B	X	S	B	-PF
STE01	27.00MHz	±1 ppm	3.3 V _{DC}	0+50 °C	nt pot		3	Pos	40/60 %	500	RoHS

STE01	T23
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Stability V T _{OP} ±ppm	
1	P
1.5	O
2	N
2.5	M
3	L
3.5	K
4	J
5	F

T _{OP} °C	
0+50	D
0+60	P
0+70	E
-10+60	F
-10+70	C
-20+70	B
-30+70	T
-30+75	W
-40+80	K
-40+85	I

Polarity	
None	X

Commodity Code
854370 90 80

Standard

V _{CC}	V _{DC}
3.3	B
5	A

Frequency tuning	
Int pot	I
None	N

Duty Cycle % / %	
40/60	S
45/55	H

Output	
HCMOS	E
TTL	H
Universal	J
TTL/HCMOS	

Mechanical Tuning ±ppm	
3	B
None	X

Tape & Reel	
500	B
Loose	L

Frequency:

Please enquire if the frequency/stability combination has been developed.
For part numbering use the first 4 characters of the frequency in Hz i.e. 27MHz = 27000000Hz so the code used in the part number is 2700. If the frequency is 100MHz or higher then the first 5 characters are used.
It is important to suffix the part number

Example

T23 - 2700PBDIEBXS-B-PF 27.00MHz

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