Tel 0044(0)118 979 1238
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STE01

STE01 HCMOS / TTL TCXO/ VCTCXO

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

RoHS2

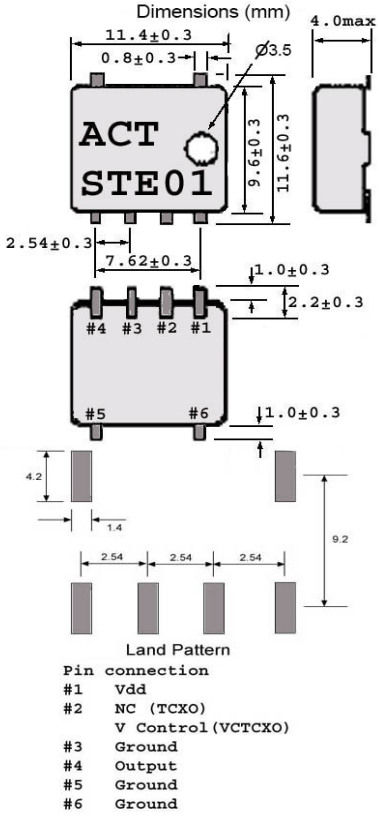
Characteristics

Frequency Range (MHz)	1.2 ~ 44.545
Supply voltage ±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)
Stabilty v T op (ppm)	Table 1
Stabilty v Vcc(ppm)	±0.3 max (5%)
Stabilty v Load (ppm)	±0.3 max (10%)
Aging @25°C (ppm)	±1.0 / yr
Tolerance @ 25°C (ppm)	Mechanical adjustment
Load ±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±1.65 (3.3V) , 2.5±2.0 (5.0V)
Frequency Tuning (ppm)	5, 10
Rating	
Storage temperature (°C)	-40 ~+85

Notes:

ESD sensitive, take appropriate precautions.

Dimensions (mm)



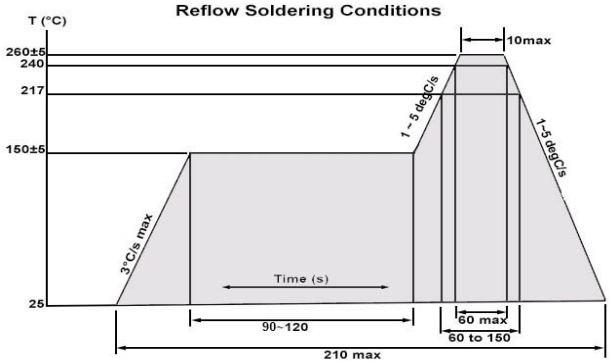
Land Pattern

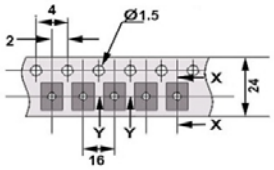
Pin connection
#1 Vdd
#2 NC (TCXO)
V Control (VCTCXO)
#3 Ground
#4 Output
#5 Ground
#6 Ground

Table 1

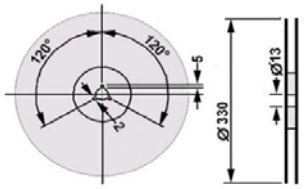
Temp	Frequency Stability v Temperature								
	±1.0	±1.5	±2.0	±2.5	±3.0	±3.5	±4.0	±4.5	±5.0
0 ~ 50°C	✓	✓	✓	✓	✓	✓	✓	✓	✓
-10 ~ 60°C		✓	✓	✓	✓	✓	✓	✓	✓
-10 ~ 70°C		✓	✓	✓	✓	✓	✓	✓	✓
-20 ~ 70°C			✓	✓	✓	✓	✓	✓	✓
-30 ~ 60°C				✓	✓	✓	✓	✓	✓
-30 ~ 70°C				✓	✓	✓	✓	✓	✓
-30 ~ 75°C				✓	✓	✓	✓	✓	✓
-40 ~ 80°C						✓	✓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

Reflow Soldering Conditions





Tape & Reel Dimensions (mm)



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

STE01

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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	HCMOS	3	± ppm	Pos	± %	40/60 %	500	RoHS

STE01	VT23

Commodity Code
854370 90 80

Standard

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 TTL/HCMOS	J

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

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	Int pot	HCMOS	3	Pos		40/60 %	500	RoHS

STE01	T23

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

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 TTL/HCMOS	J

Mechanical Tuning ±ppm	
3	B
None	X

Tape & Reel	
500	B
Loose	L

Commodity Code
854370 90 80

Standard

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 - 2700PBDIEBXSB-PF 27.00MHz