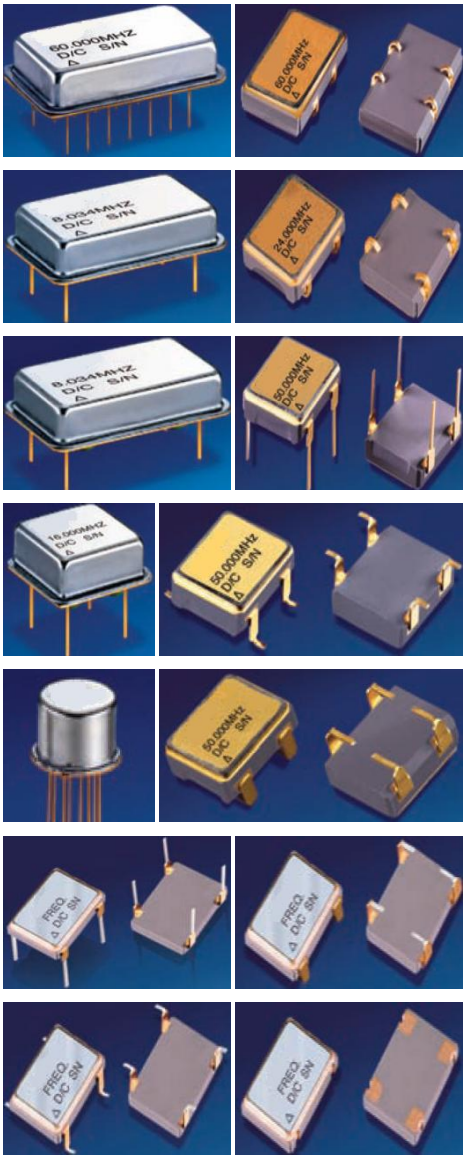
HIGH-TEMPERATURE UP TO +225 ℃ CRYSTAL CLOCK OSCILLATORS
(高温晶体振荡器)

Description:

Our high-temperature crystal oscillators consist of a source clock square wave generator, logic output buffers and/or logic divider stages, and a round AT-cut or IT-cut high-precision quartz crystal built in a wide selection of Dual-In-Line (DIP), Surface-Mount (SMD), or 7x5mm leaded or Surface-Mount (SMD) hermetically sealed packages



Features:

- ECCN: EAR99
- DFARS 252-225-7014 compliant: Electronic Component Exemption
- USML registration #M17677
- Wide frequency range: 1Hz to 110MHz
- Wide operating temperature: -55 ℃ to +225 ℃
- Choice of output logic options (CMOS, ACMOS, HCMOS, LVHCMOS, TTL, Sine and Z outputs)
- Supply voltages: 3.3V to 15V
- Hermetically sealed package
- Tight or custom symmetry available
- Fast start-up time
- Capacitive load drive capability (Z output)
- Multiple outputs available
- Fundamental and third overtone designs
- 100% testing including at extreme temperatures
- Does not use pure lead or pure tin in its products
- RoHS compliant

Applications:

- Oil service industry
- Gas turbine controls
- Measurement while drilling, data-logging tools
- Industrial controls
- High-temperature switching power supplies modules

Materials:

- Standard AL2O3 thick-film substrate
- Standard gold (Au) and Aluminum (Al) wire bonding
- High-temperature non-conductive or Ag conductive epoxies
- Round or strip AT-cut fundamental or third-overtone quartz crystals
- Standard design for crystal mounting for high-shock (up to 36,000g for some packages)
- CMOS, HCMOS, LVHCMOS oscillator IC or discrete semiconductor used

Ordering Information:

HT 84 3 L P 2 M - 20M

Package options:
See package drawings

Supply voltage options:
3 = 3.3V +/- 10%
5 = 5.5V +/- 10%
Available with 2.5V to 18V

Logic options:
C = CMOS
A = ACMOS
H = HCMOS
L = LVHCMOS
T = TTL
S = SINE

Operating temperature options:

A = 0 ℃ to +150 ℃	I = -40 ℃ to +150 ℃
B = 0 ℃ to +175 ℃	J = -40 ℃ to +175 ℃
C = 0 ℃ to +200 ℃	K = -40 ℃ to +200 ℃
D = 0 ℃ to +225 ℃	L = -40 ℃ to +225 ℃
E = -20 ℃ to +150 ℃	M = -55 ℃ to +150 ℃
F = -20 ℃ to +175 ℃	N = -55 ℃ to +175 ℃
G = -20 ℃ to +200 ℃	O = -55 ℃ to +200 ℃
H = -20 ℃ to +225 ℃	P = -55 ℃ to +225 ℃

Frequency stability options:
1 = +/-100ppm
2 = +/-150ppm
3 = +/-200ppm
4 = +/-250ppm
5 = +/-300ppm
6 = +/-350ppm
7 = +/-400ppm
8 = +/-450ppm

Screen options:
Blank = No Screening
M = Per MIL-PRF-55310, Level B

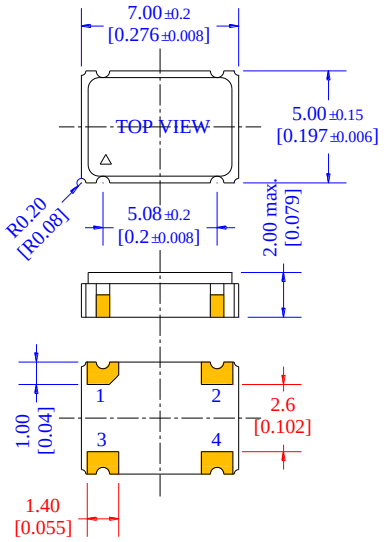
Frequency

Other options:

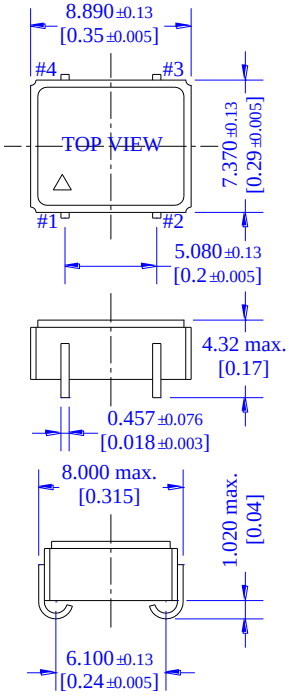
- Tri-state output (May not be available in certain low frequencies and package types)
- Multiple outputs
- Phase locked output
- Low voltage / Low current
- Voltage control (VCXO / VCO)
- Hybridize customer's designs

Packages: (Other packages are available on request)

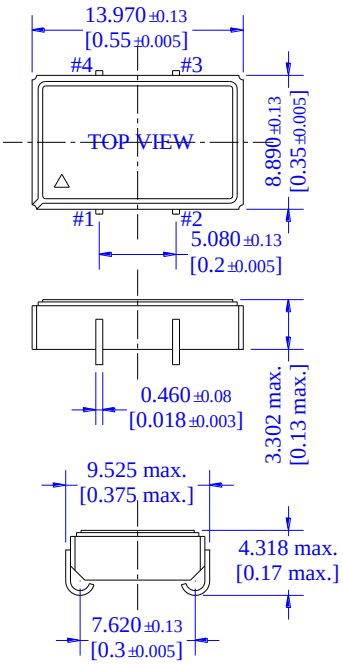
Option code: 84



Option code: 88

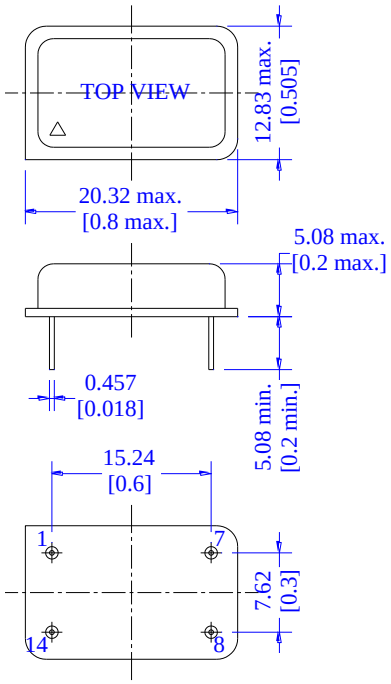


Option code: 78



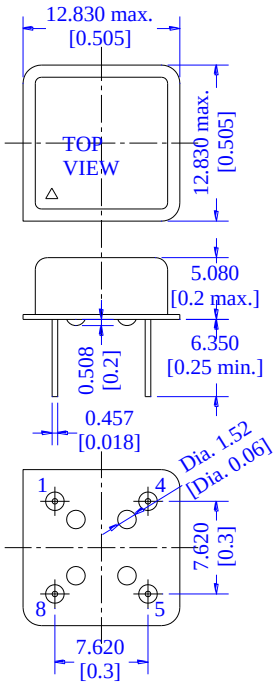
Option code: 41

(DIL 14, 4 pins)

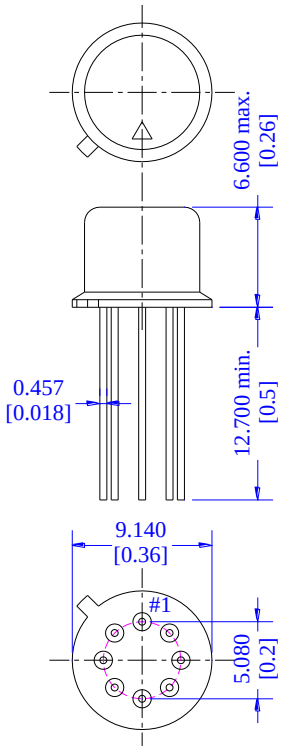


Option code: 50

(DIL 08, 4 pins)



Option code: 1



Pin Functions:

Option No.	Vcc	GND	Output	E/D or NC
41	14	7	8	1
50	8	4	5	1
78, 88	4	2	3	1
84	4	2	3	1
1	8	4	5	1