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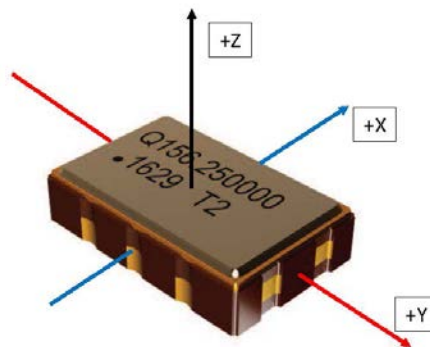
Ref.: Mechanical shock, half-sine, 18,000g, 0.1ms, 18 shocks (3 per axis)

Q-Tech P/N: QT735LD series

SUMMARY

Q-Tech miniature oscillators QT735 series have been tested and successfully passed the mechanical shock, half-sine, 0.1ms, 18,000g peak, in all three axes, three shocks per axis, a total of 18 shocks for frequency between 125MHz and 240MHz.

AXES DEFINITION



TEST RESULTS

P/N	Frequency	Qty tested	Quantity passed	Quantity failed
QT735LD9	125.000MHz	3	3	0
QT735LD9	128.000MHz	5	5	0
QT735LD15	160.000MHz	5	5	0
QT735LWD15	240.000MHz	5	5	0

WORST-AXIS DEFINITION

Q-Tech defined worst-axis as the Z axis with the plane perpendicular to the crystal mounting plane.

2. MECHANICAL SHOCK TEST

2.1 DESCRIPTION OF TEST EQUIPMENT

Categories Accelerometer

Details Attach method

Component Supplier ENDEVCO 727-60K-10-120

Serial Number 11310

Calibration Date MAY 13, 2019

Drop tester Support table Lansmont P30 exempt from check

Note: Drop tester is exempt from calibration is because the accelerometer is calibrated.

2.2 LABORATORY AMBIENT CONDITION

Temperature : 25 °C ± 5 °C

Relative humidity : 55 % ± 15 % (RH)

2.3 REFERENCE DOCUMENT

The test is referred to MIL-STD-202, Method 213

2.4 TEST CONDITION

Drop-testing :

Pulse shape : Half-sine waveform

Table impact acceleration : 18,000 G(-/+10%)

Pulse duration : 0.1ms(-/+10%)

Times of drop : The test should be conducted with 3 drop / shock in -/+ X, -/+ Y, and -/+ Z directions. Total 18 drops.

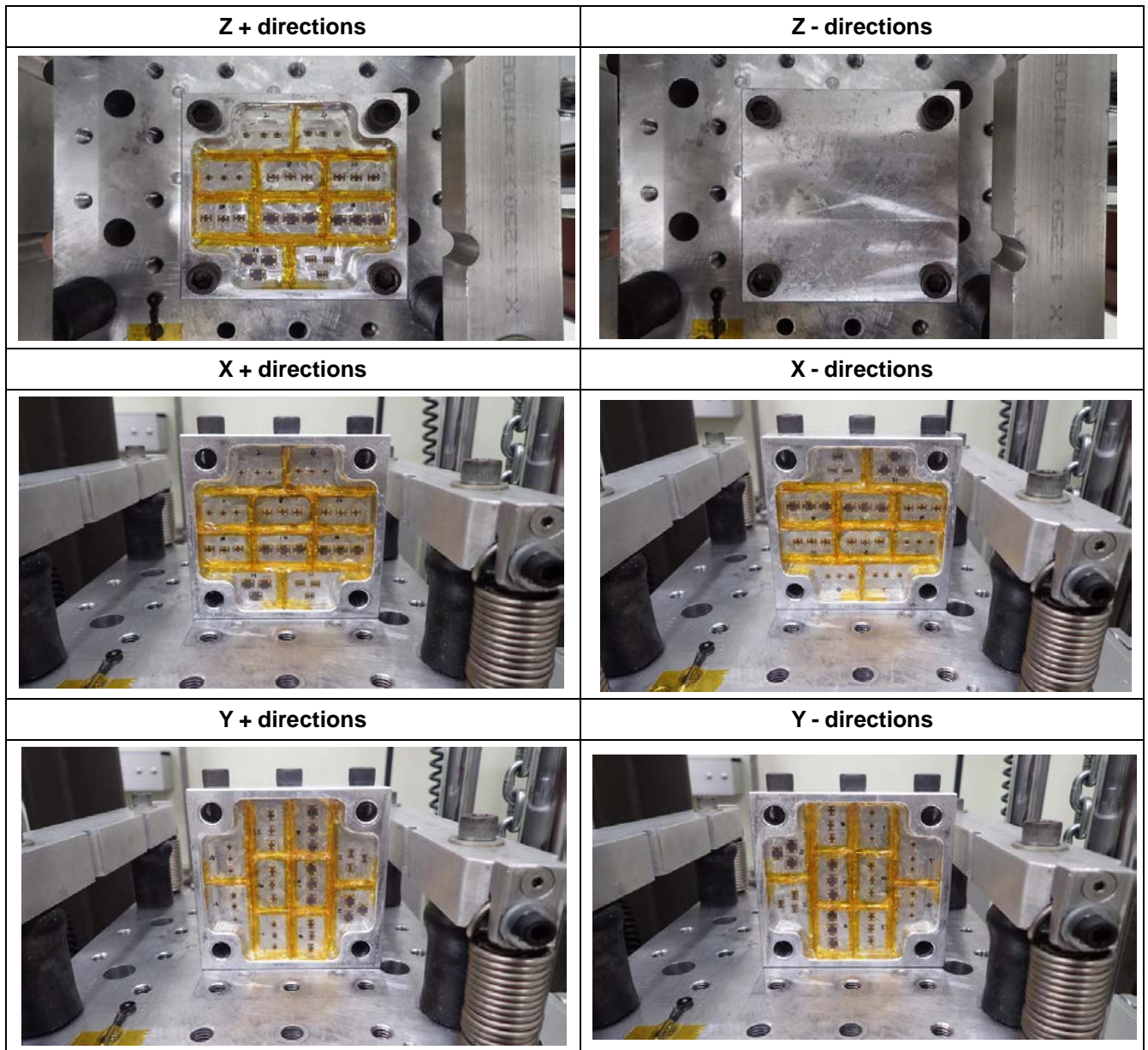
Test order : [Z+] = > [Z-] = > [X+] = > [X-] = > [Y+] = > [Y-]

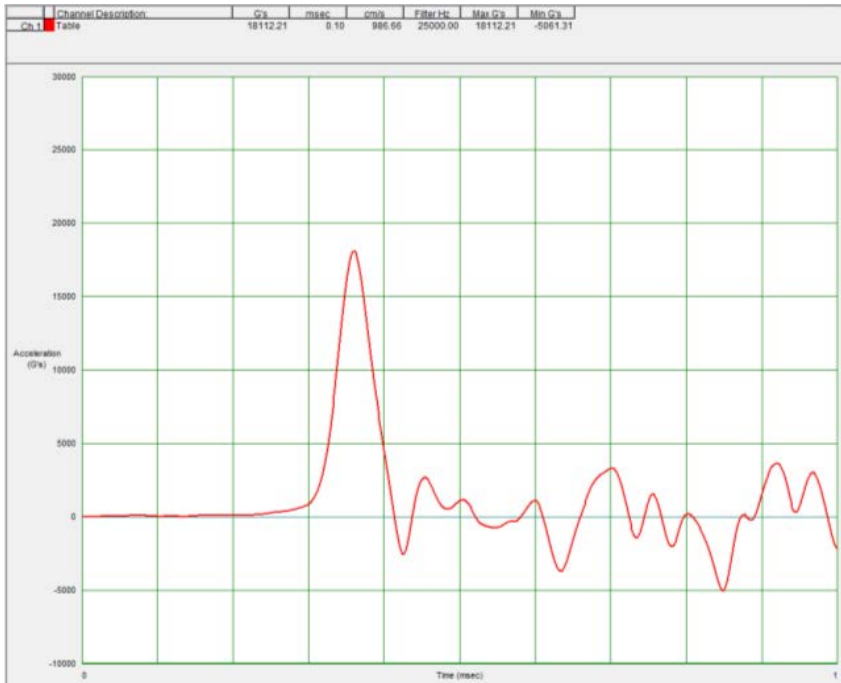
2.5 SUMMARY OF TEST

After testing, visual inspection of sample surfaces showed no abnormality.

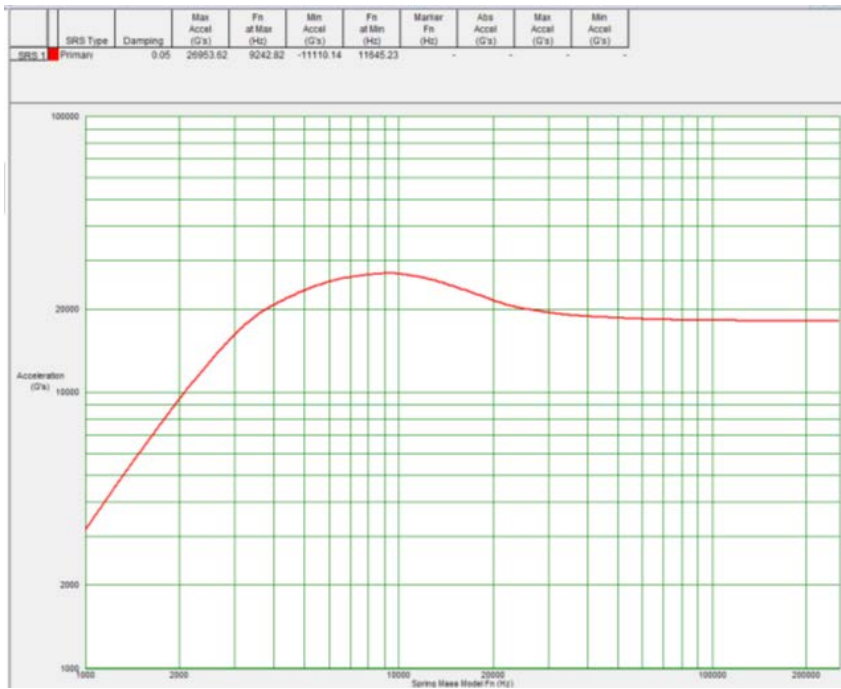
Functional check is performed by customer.

Attachment 1 : Photo of board level drop test setup





Shock acceleration vs. time



Shock response spectra