

**Detail specification for
cold welded seal quartz
crystal units for
oscillator
applications —
DN, 47 U/2, DQ and DP
enclosures, 17
to 75 MHz frequency
range —
Third overtone
thickness-shear mode,
At-cut, for operation
over wide temperature
ranges
(non-temperature
controlled) —
Full assessment level**

UDC 621.373.5:621.382

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 9 and a back cover.

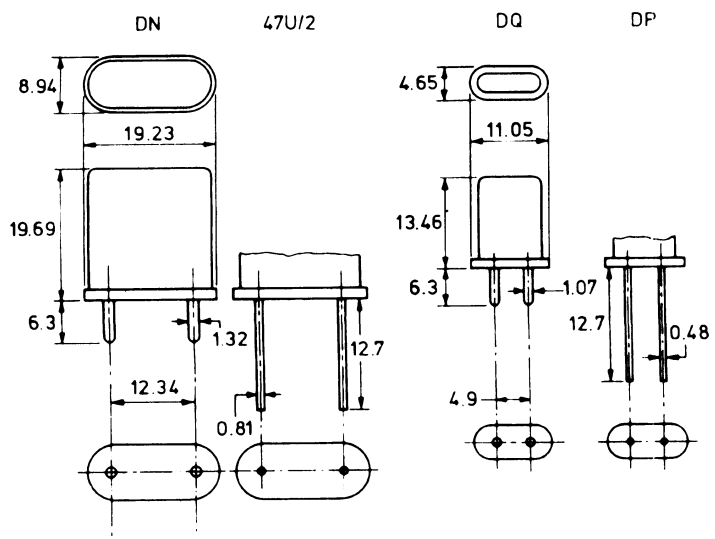
This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date	Comments

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ELECTRONIC COMPONENTS OF ASSESSED QUALITY: DETAIL SPECIFICATION				
				COLD-WELDED QUARTZ CRYSTAL UNITS FOR OSCILLATOR APPLICATIONS
				FULL ASSESSMENT
ENCLOSURE TYPE		DN	DQ	
		47	U/2	DP
AVAILABLE FREQUENCY RANGE		17 to 75 MHz		
				THIRD OVERTONE THICKNESS-SHEAR MODE, AT-CUT, FOR OPERATION OVER WIDE TEMPERATURE RANGES (NON TEMPERATURE-CONTROLLED)

For detail dimensions see BS 5069-1

Dimensions in millimetres and are maximum except where otherwise stated.

Metal case, conductive finish.

1 Ratings

Operating temperature range
Circuit conditions
Drive level

See Table 1.

Environmental category : 65/100/56

Bump severity : 4 000 $\pm$ 10 bumps at 390 m/s² acceleration.

Vibration severity : 10 to 60 Hz; 0.75 m displacement
60 to 500 Hz; 98.1 m/s² acceleration

30 min in each of
three mutually
perpendicular planes
at 1 octave/minute

Shock severity : 981 m/s² acceleration for 6 ms duration; three shocks in each direction along three mutually perpendicular axes, trapezoidal pulse.

2 Characteristics at reference temperature 20 $\pm$ 2 °C

Frequency tolerance : See Table 1.

Resonance resistance : 40 Ω max.

Maximum shunt capacitance : See Table 1.

Free volume (approximate) : 2 750 mm³ for types DN and 47 U/2
500 mm³ for types DP and DQ