

Product Specification for Reference Only

Issued Date: April 30, 2015
Rev.: N

Part Description: Ultrasonic Transducer

MURATA Part No.: MA40S4S

The product specification in this sheet is for reference only. The contents of this specification are subject to change.

You are requested to receive the latest specification and to return one copy of the specification to us with your receipt signature before going into mass production.

Sensor products department 1
Sensor products division
Murata Manufacturing Co., Ltd.

Specification of Ultrasonic Transducer Type: MA40S4S

1. Scope

This product specification is applied to the Transmitter of Ultrasonic Transducer (Open Type Structure).

2. Customer Part Number

3. Murata Part Number

MA40S4S

4. Structure

Dimension : As per Fig.1

5. Absolute Maximum Ratings

	Items	Specification	Note
5-1	Operating temperature range	-40 to +85 degC	-
5-2	Storage temperature range	-40 to +85 degC	-
5-3	Max. Input Voltage	20 Vp-p	at 40kHz, Square continuous wave

6. Specifications (* Temperature 25 ± 3 degC, 45 to 75 %R.H, unless otherwise noted)

	Items	Specification	Note
6-1	Operating Frequency	40.0 kHz	For reference
6-2	SPL (Sound Pressure Level)	120 +/- 3 dB	at 40 kHz, 10 Vrms, Sine wave, 30 cm 0 dB = 2x10 ⁻⁵ Pa (per measuring circuit Fig.2)
6-3	Capacitance	2,550 pF +/- 20 %	at 1 kHz
6-4	Insulation Resistance	More than 100 Mohm	at 50 V D.C.
6-5	Temperature Characteristics	Within +/- 3dB against initial value at 25 degC	-40 to +85 degC