

K Series 40KT18 and 40KR18

SensComp's 'K' Series Closed Face Piezoelectric Ultrasonic Sensors – 40KT18 and 40KR18

Features

Closed Face Construction
Environmentally Rugged Aluminum Housing
Durable, Sealed Construction Protects Against Water, Heat, Humidity and Other Elements, IP67 Rated
Specifically Intended for Operation in Air at Ultrasonic Frequencies

Part No.

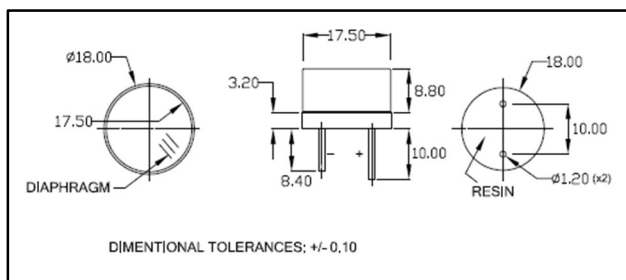
*PID# 625598LF – K Series 40KT18

*PID# 625599LF – K Series 40KR18

*RoHS Compliant

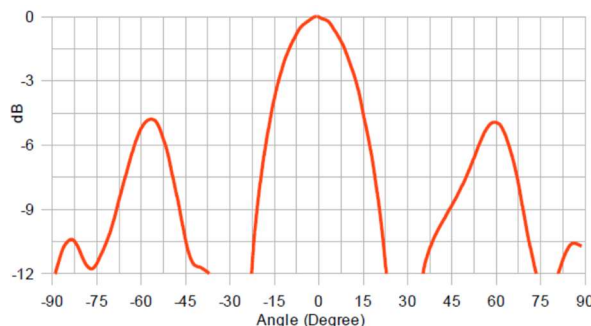
Specifications

40KT18 Transmitter
40KR18 Receiver
Center Frequency 40.0 ± 1.0 kHz
Bandwidth (-6 dB) 40KT18 1.5 kHz
40KR18 1.5 kHz
Transmitting Sound Pressure Level 110 dB min
at 40.0 kHz; 0dB re 0.0002 µbar per 10 Vrms at 30 cm
Receiving Sensitivity -70 dB min
at 40.0 kHz; 0dB = 1 volt/ µbar
Capacitance at 1 kHz ± 20% 2900 pf
Maximum Driving Voltage (cont.) 15 Vrms
Total Beam Angle (-6 dB) 35° typical
Operating Temperature -30° to 70° C
Storage Temperature -40° to 80° C
all specifications taken typical at 25° C
Dimensions: dimensions are in mm

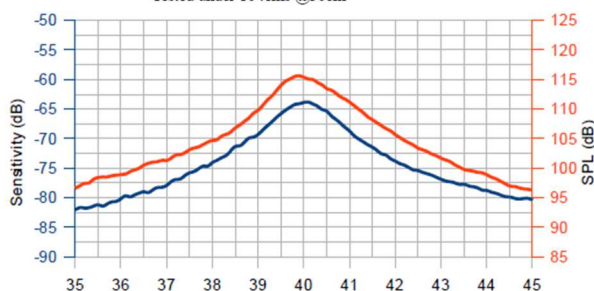


Specifications

Beam Angle: Tested at 40.0 kHz

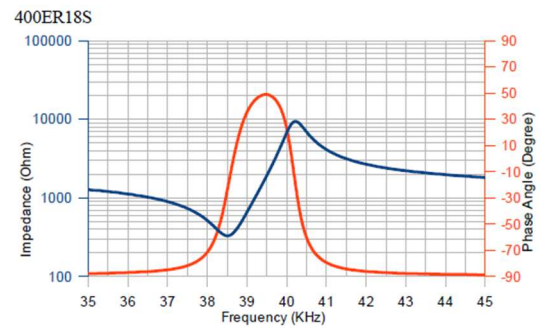
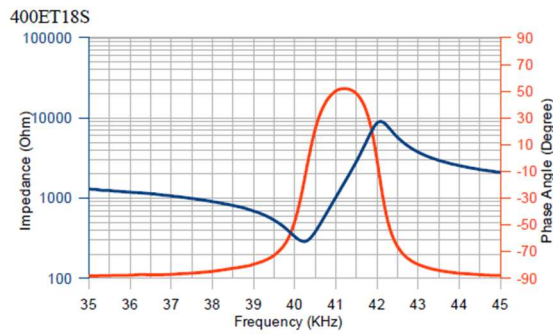


Sensitivity/Sound Pressure Level
Tested under 10Vrms @30cm



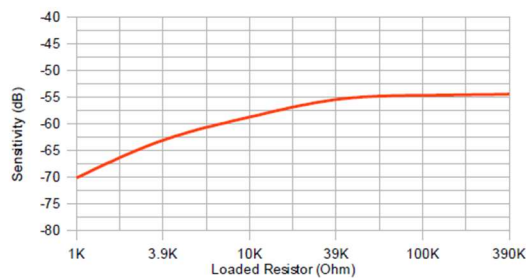
Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

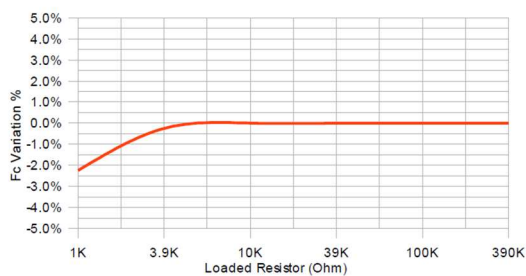


40KR18 Receiver

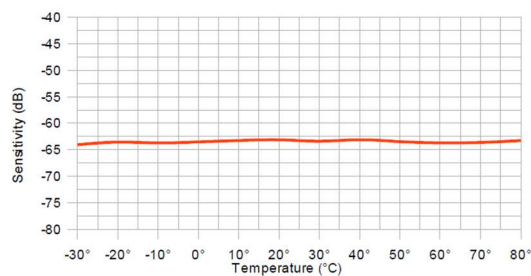
Sensitivity Variation vs. Loaded Resistor



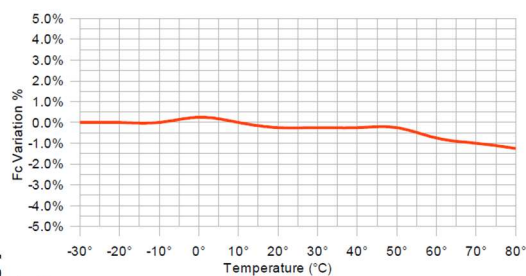
Center Frequency Shift vs. Loaded Resistor



Sensitivity Variation vs. Temperature

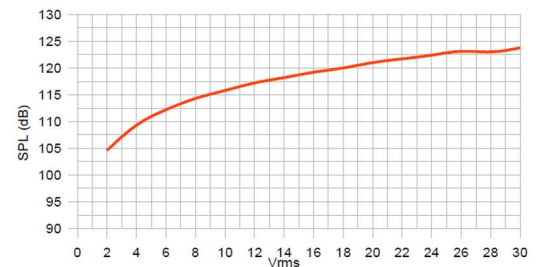


Center Frequency Shift vs. Temperature

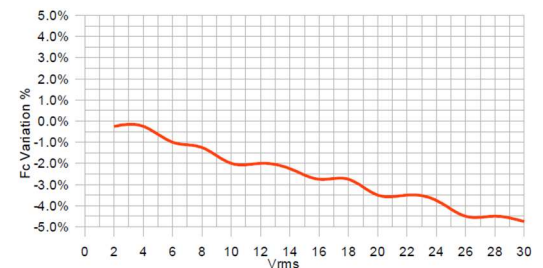


40KT18 Transmitter

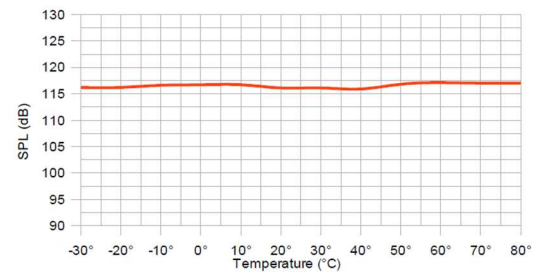
SPL Variation vs. Driving Voltage



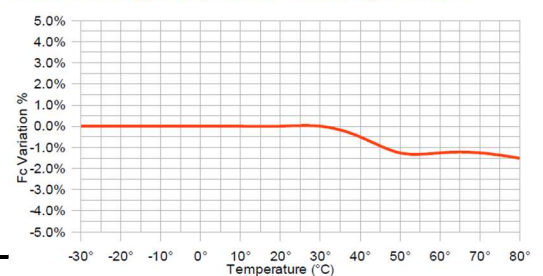
Center Frequency Shift vs. Driving Voltage



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



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