2.4GHz DSSS SPI Radio with External Antenna Connector

AW24MUFL
Product Brief

Features

- The AW24MUFL is a 2.4-GHz Direct Sequence Spread Spectrum (DSSS) complete radio module which includes the Cypress radio integrated circuit CyFi™ CYRF7936, and all external components
- Operates in the unlicensed worldwide Industrial, Scientific and Medical (ISM) band (2.400 GHz–2.483 GHz)
- 21mA operating current (Transmit @ –5 dBm)
- Transmit power up to +4 dBm
- Receive sensitivity up to –97 dBm
- Sleep Current <1 μA
- Operating range of up to 20m indoor or 40m LOS.
- DSSS data rates up to 250 kbps, GFSK data rate of 1 Mbps
- Auto Transaction Sequencer (ATS) - no micro controller intervention
- Framing, Length, CRC16, and Auto ACK
- Fast Startup and Fast Channel Changes
- Separate 16-byte Transmit and Receive FIFOs
- AutoRate™ - dynamic data rate reception
- Receive Signal Strength Indication (RSSI)
- 4-MHz SPI microcontroller interface
- No proprietary software required
- Serial Peripheral Interface (SPI) control while in sleep mode
- Vertical or horizontal mounting
- Operating voltage from 2.4 to 3.6 volts
- Operating temperature from 0 to 70°C
- Size: 16 mm x 13.5 mm (~0.6" x 0.5") with U.FL Antenna Connector
- Weight: 2 grams
- FCC Modular Approval Grant to meet FCC Part 15, EN 300 328-1, EN 301 489-1, EN 301 489-7 and Industry Canada RSS-210 standards In Progress.
- An FCC Module Approval (MA) Grant provides customers significant cost savings, by allowing customers to adopt the AW24MXXL FCC ID into their own products

Applications

- PC Human Interface Devices (HID)
- White Goods (Smart Appliances)
- Consumer
- Building/Home Automation
- Industrial Control
- Transportation

Operating Conditions

- V_{CC}……2.4V to 3.6V
- T_A (Ambient Temperature under Bias)……0°C to +70°C
- Ground Voltage……..0V
- F_{OSC} (Crystal Frequency)……..12 MHz ±30 ppm

RoHS Compliant

Pb lead-free

Artaflex Inc.
215 Konrad Crescent
Markham, Ontario, Canada
L3R8T9
905-479-0148

PBAW24MUFL Rev 1v0
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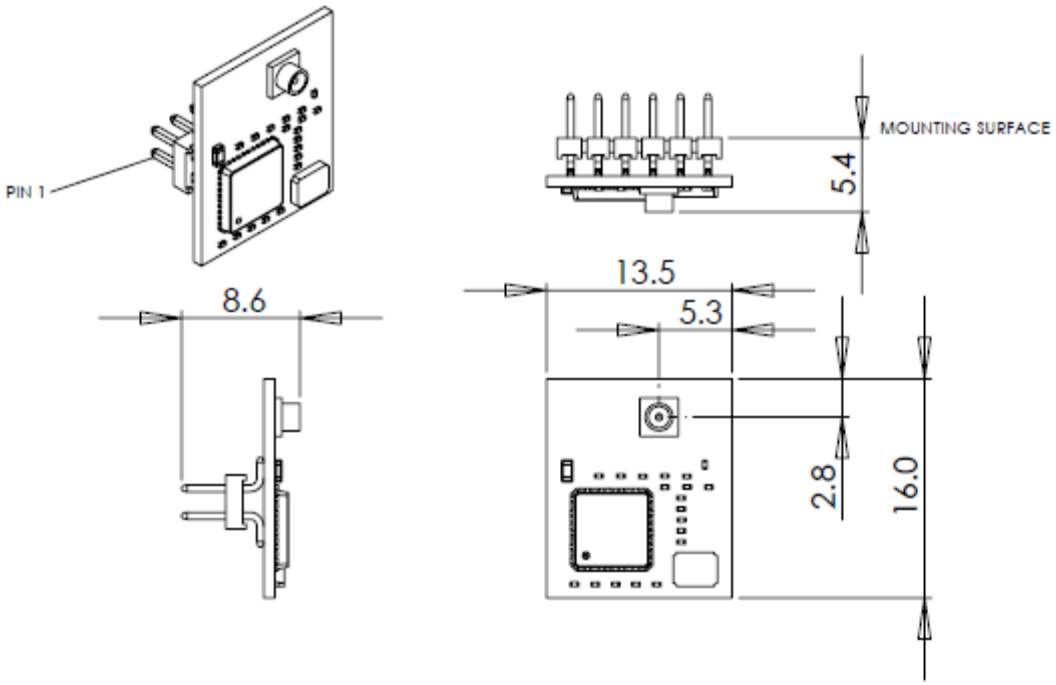
http://www.artaflexmodules.com

Mechanical Diagram (Dimensions in mm)



Ordering Information

Part Number	Description	Temperature
AW24MUFL	Micro Module with External Antenna Connector, 12 Pin Header in Commercial Temperature	0 to 70ºC