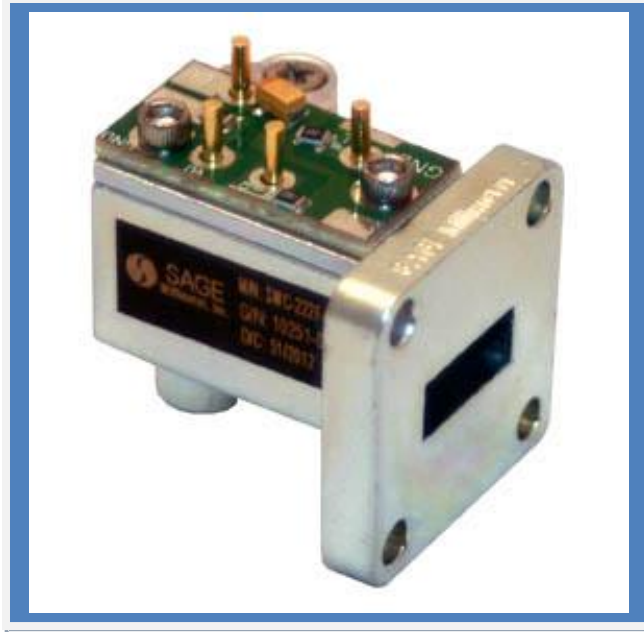


Low Cost K Band FMCW Ranging and Directional Sensor Module



Model SSP-24303-42-D1 is a low cost, production ready K band FMCW ranging and directional sensor module. The center frequency of the module is set at 24.125 GHz with +/-150 MHz frequency modulation bandwidth and +3 dBm nominal output power. The sensor operates from a single +5 .0 Vdc power supplier and typically draws 250-mA current and requires 0 to +15 volts voltage swing for electrical tuning. The sensor incorporates an I/Q mixer to provide target moving direction information. The conversion loss of the sensor is around 9 dB. The sensor is designed and manufactured to meet FCC Parts 15 regulations and exhibits -0.8 MHz/°C frequency and -0.03 dB/°C power stability. The operation temperature range of the sensor is from -40 to +85 °C. The standard model is equipped with WR-42 waveguide with UG595/U flange interface, measures 1.00" (H) x 0.85"(W) x 1.00" (L) and weighs 2 Oz. This sensor is the key building block for many FMCW ranging and directional sensing systems. The output power levels other than +3 dBm are offered under different model numbers. Contact factory for product details.

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