

### FEATURES

- \* Quartz Stability
- \* Ideal for wireless security and remote control applications

The INS-DR1 Series are 1-port SAW (Surface Acoustic Wave) resonators in a thru-hole TO39-3A package. They offer a fundamental mode, quartz frequency and are ideal for remote control and wireless security transmitters



### OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	INS-D479.5B			INS-D480A			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
CENTER FREQUENCY		478.0	479.5	481.0	479.0	480.0	481.0	MHz
INSERTION LOSS	@ FO			23		19.5	21	dB
3 dB PASS BAND		25.7	26.7	27.7	16.6	17.6	18.6	MHz
SPURIOUS RESPONSE	0 ~ 750MHz	30						dB
RELATIVE ATTENUATION	@ 471.0 MHz					3.4	5.4	dB
	@ 489.0 MHz					3.0	5.4	dB
	430 ~ 461 MHz				38.0	50.0		dB
	499 ~ 530 MHz				38.0	45.0		dB
AMPLITUDE RIPPLE	476.0 ~ 484.0 MHz					0.3	0.6	dB
GROUP DELAY	480.0 MHz					281.0		nS
GROUP DELAY RIPPLE	471.5 ~ 488.5 MHz					11.5	18.0	nS
FREQUENCY STABILITY	-25 ~ +85 °C			-86		-86		PPM/°C
INSULATION RESISTANCE	10 V DC	1						MΩ
TERMINATING IMPEDANCE	Input		60 Ω/4.8 pF			70 Ω/3.7 pF		
	Output		260 Ω/3.1 pF			280 Ω/2.5 pF		
OPERATING TEMPERATURE		-25		+85	-25		+85	°C
STORAGE TEMPERATURE		-40		+85	-40		+85	°C

### PACKAGE DIMENSIONS (mm)

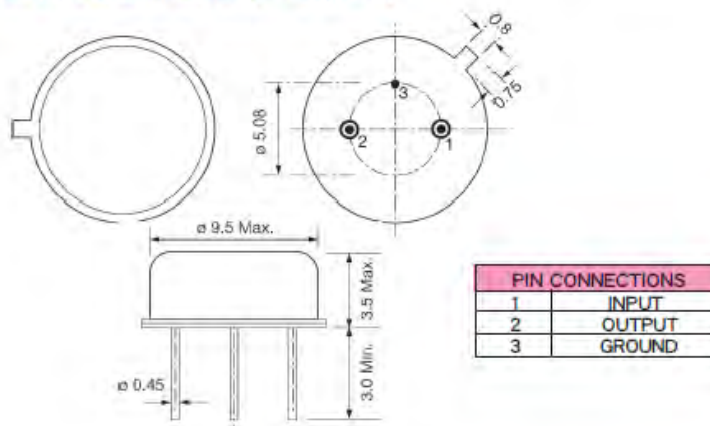


Figure 1) Top Side and Bottom views