

### FEATURES

- Glass sealed ceramic package
- Tight stability / high reliability
- Wide frequency range
- High frequency fundamental available
- Tape & Reel (1,000 pcs)

### SMD QUARTZ CRYSTAL

The 5ASM is a very cost effective, low profile SMD quartz crystal. It is ideal for PCMCIA, ethernet and fax modem card applications.

### PART NUMBERING GUIDE “EXAMPLE”

PART NUMBER	LOAD CAPACITANCE*	TAPE & REEL	FREQUENCY
5ASM	- 20	R	- 10.00 MHz

\* Load capacitance (xx=xx pF, S= series resonance).

Note: See Product Selection Guide for additional options.

### OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE	$f_0$	9.8		100.0	MHz
CALIBRATION TOLERANCE	@ +25°C	-30		+30	PPM
FREQUENCY STABILITY, ref @ 25°C	-10 ~ +70°C	-50		+50	PPM
SHUNT CAPACITANCE	$C_0$			5.0	pF
LOAD CAPACITANCE ( $C_L$ )	(Customer Specified)	10.0	18.0 standard	Series	pF
DRIVE LEVEL ( $D_L$ )	9.8 ~ 100.0MHz			0.5	mW
OPERATING TEMPERATURE	$T_{OPR}$	-10		+70	°C
STORAGE TEMPERATURE	$T_{STG}$	-40		+85	°C
AGING (FIRST YEAR)	@ +25°C	-5.0		+5.0	PPM

### EQUIVALENT SERIES RESISTANCE / MODE OF OSCILLATION

FREQUENCY RANGE (MHz)	MODE	MAX ESR $\Omega$	FREQUENCY RANGE (MHz)	MODE	MAX ESR $\Omega$
9.800 ~ 15.999	Fundamental	60	28.000 ~ 34.999	3rd O/T	80
16.000 ~ 42.000	Fundamental	40	35.000 ~ 100.000	5th O/T	60

### PACKAGE DIMENSIONS (mm)

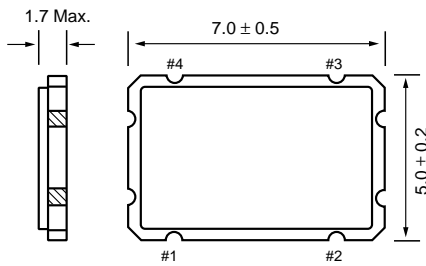


Figure 1) 5ASM - Side and Top view

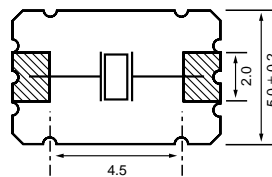


Figure 2) 5ASM - Pad Configuration Bottom view

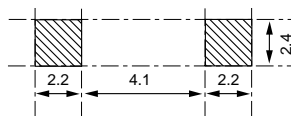


Figure 3) 5ASM - Recommended Solder Pad Layout - Top view

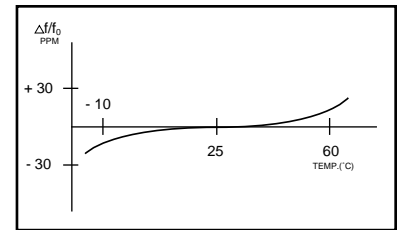


Figure 4) Frequency vs Temperature Curve