

## FEATURES

- Cost effective
- Space saving design
- Low profile
- Tape & Reel (1,000 pcs)

## SMD QUARTZ CRYSTAL

The MP35L, 25L is an excellent choice for the SMD version of the MP35 leaded crystal. The MP35L has a case height of 4.3mm maximum in a resistance weld metal package.

## PART NUMBERING GUIDE "EXAMPLE"

PART NUMBER	LOAD CAPACITANCE*	TAPE & REEL	FREQUENCY
MP35L	- 20	R	- 6.144 MHz

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

## OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE	$f_0$	3.579		70.000	MHz
FREQUENCY TOLERANCE	@ +25°C	-50		+50	PPM
FREQUENCY STABILITY	$T_a = -10 +70^\circ\text{C}$	-50		+50	PPM
OPERATING TEMPERATURE ( $T_{OPR}$ )	$T_{OPR}$	-10		+70	°C
STORAGE TEMPERATURE ( $T_{STG}$ )	$T_{STG}$	-30		+85	°C
SHUNT CAPACITANCE ( $C_0$ )	$C_0$			7.0	pF
LOAD CAPACITANCE ( $C_L$ )	$C_L$ (Customer Specified)	12	18.0 standard	Series	pF
DRIVE LEVEL	3.570 - 70.000 MHz			0.5	mW
AGING (FIRST YEAR)	@ +25°C	-5.0		+5.0	PPM

## EQUIVALENT SERIES RESISTANCE

FREQUENCY RANGE (MHz)	MODE	MAX ESR $\Omega$	FREQUENCY RANGE (MHz)	MODE	MAX ESR $\Omega$
3.579 - 4.999	Fundamental	150	13.000 - 19.999	Fundamental	40
5.000 - 5.999	Fundamental	80	20.000 - 29.000	Fundamental	30
6.000 - 6.999	Fundamental	70	26.000 - 39.999	3rd O/T	100
7.000 - 8.999	Fundamental	60	40.000 - 70.000	3rd O/T	80
9.000 - 12.999	Fundamental	50			

## PACKAGE DIMENSIONS (mm)

Height "H" (max.)
MP35L 4.3 mm
MP25L 3.2 mm

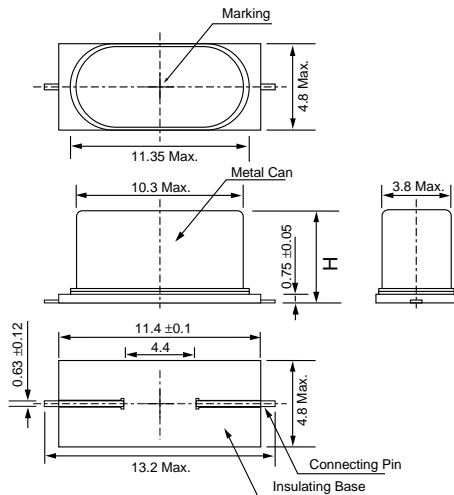


Figure 1) MP35L, 25L - Top, Side, Bottom and End views

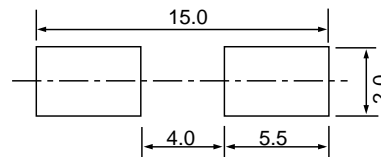


Figure 2) MP35L, 25L Land Pattern - Bottom view

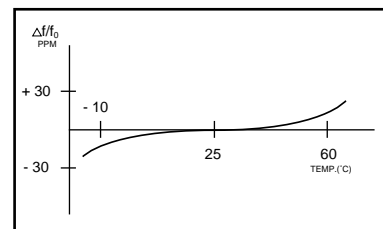


Figure 3) Frequency vs Temperature Curve