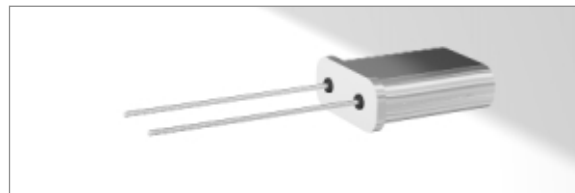


## Quartz Crystal UM-1/UM-5 DIP Type



### 1. Parameters

Parameter		Specification
Frequency Range	(MHz)	10.0-125.0MHz UM-1 \ 16.0-125.0MHz UM-5
Operating Mode		See Table 2
Load Capacitance $C_L$	(pF)	18 pF Std. 8 to 50PF Series available
Frequency Tolerance $F_L$	(ppm)	$\pm 10\text{ppm}@25^\circ\text{C}$ Std. ( $\pm 5\text{--}\pm 100\text{ppm}$ available)
Temperature Tolerance $T_L$	(ppm)	$\pm 10\text{ppm}$ Std. (See Table 3)
Operating Temperature $T_O$	( $^\circ\text{C}$ )	-20 to +70 $^\circ\text{C}$ Std. (See Table 3)
Storage Temperature $S_T$	( $^\circ\text{C}$ )	-50 to +125 $^\circ\text{C}$
Motional Resistance $R_S$	( $\Omega$ )	See Table 2
Shunt Capacitance $C_O$	(pF)	7pF max
Drive Level $D_L$	(mW)	0.05-1mW
Insulation Resistance $I_R$	(M $\Omega$ )	500(Dc100 $\pm$ 10V)
Aging @ 25 $^\circ\text{C}$	(ppm/y)	$\pm 5\text{ppm}$ max

### 2. Operation Mode and $R_S$

FREQUENCY TYPE	MODE	UM-1 ( $\Omega$ max)	UM-5 ( $\Omega$ max)
10 ~ 15 MHz	Fund	40	
15 ~ 20 MHz	Fund	30	40
20 ~ 25 MHz	Fund/3 <sup>rd</sup> Overtone	25	30
25 ~ 30 MHz	Fund/3 <sup>rd</sup> Overtone	50/-	50
30 ~ 75 MHz	3 <sup>rd</sup> /5 <sup>th</sup> Overtone	70	70
75 ~ 100 MHz	3 <sup>rd</sup> /5 <sup>th</sup> Overtone	70/80	70/80
100 ~ 125 MHz	5 <sup>th</sup> Overtone	80	80

### 3. Frequency-Temperature Tolerance

Cutting	Temp range	Tolerance (ppm)				
		$\pm 5.0$	$\pm 10$	$\pm 15$	$\pm 20$	$\pm 30$
AT	0~+50 $^\circ\text{C}$	o	o	o	o	o
	-10~+60 $^\circ\text{C}$		•	o	o	o
	-20~+70 $^\circ\text{C}$			o	o	o
	-30~+80 $^\circ\text{C}$				o	•
	-40~+85 $^\circ\text{C}$					o

• Recommended      o Available

### Dimensions(mm)

