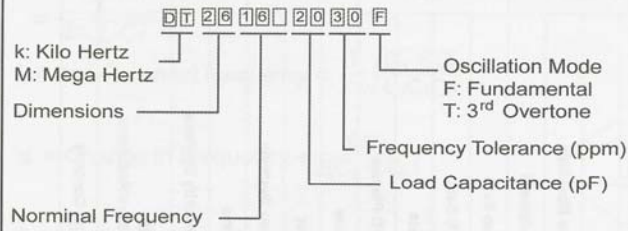


## CRYSTAL UNITS

AT/ DT Series

### PART NUMBERING SYSTEM



CYLINDRICAL METAL CAN



### Electrical Characteristics

	DT-26	DT-38	AT38	AT-39	AT-310
Frequency Range	32.768kHz~153.6kHz	32.768kHz, 60 kHz ~90kHz	11.06MHz~27.13MHz	4.0MHz~13.5MHz	3.58MHz~49.86MHz
Frequency Tolerance	±20, 30ppm	±20, 30, 50ppm	±20, 30, 50ppm	±30ppm	±20, 30ppm
ESR	22~40kΩ	20~180Ω	20~180Ω	40~50kΩ	60,70,80~180Ω
Insulation Resistance	100, 500MΩ at 100VDC	100, 500MΩ at 100VDC	100, 500MΩ at 100VDC	500MΩ at 100VDC	500MΩ at 100VDC
Shunt Capacitance	1~1.5pF ± 0.3pF	1.3,7pF ± 0.3pF	1.3,7pF ± 0.3pF	1.5,7,20pF ± 0.3pF	5.7pF ± 0.3pF
Loading Capacitance	12.5pF	16.20pF	16.20pF	16,20,32pF	16, 20pF
Drive Level	0.36~0.1μW	10, 50,100, 500μW	10, 50,100, 500μW	50,100μW	0.36~1.0, 50, 100μW
Operation Temperature	-10~60°C	-10~60°C	-10~60°C	-10~60°C	-10~60°C
Storage Temperature	-20~70°C	-20~70°C	-20~70°C	-20~70°C	-20~70°C
Aging	±5ppm/ year	±3.5ppm/ year	±3.5ppm/ year	±3.5ppm/ year	±3.5ppm/ year
Oscillation Mode	Fundamental	Fundamental	Fundamental/3 <sup>rd</sup> Overtone	Fundamental/3 <sup>rd</sup> Overtone	Fundamental/3 <sup>rd</sup> Overtone

### Mechanical Characteristics

Dimension (mm)	H <sub>L</sub>	H	∅D (max)	∅d	P
DT-26	5.0 min 14.0 max	6,8,9,10	2.0 2.1	0.25 ± 0.05	0.7 ± 0.2 1.1 ± 0.25
AT-310	7.5 min 11.0 max	8,9,10,10.8	3.0	0.25 ± 0.05 0.3 ± 0.07	0.8 ± 0.15 1.1 ± 0.2
AT/DT-38	7.5 min 11.0 max	8,9,10,10.8	3.0 3.1	0.25 ± 0.05 0.3 ± 0.07	0.8 ± 0.15 1.1 ± 0.25
AT-39	7.5 min 12.0 max	8,9,10,10.8	3.0 3.1	0.25 ± 0.05 0.3 ± 0.7	0.8 ± 0.15 1.1 ± 0.25

