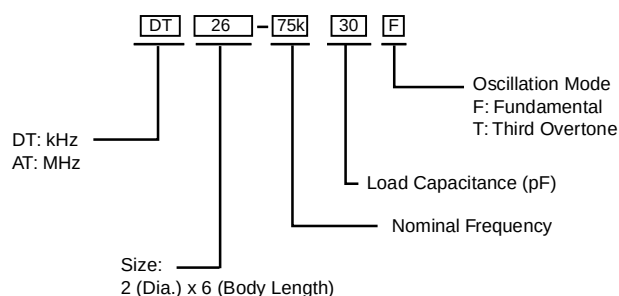


CRYSTAL UNITS

AT/DT Series

PART NUMBERING SYSTEM



E.g.: DT2x6 Package, 32.768kHz, 12.5pF Load Cap., 30ppm Tolerance, Fundamental Mode
P/N = DT26-32.768k12.530F



Electrical Characteristics

	DT-26	DT-38	AT-38	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 100V _{DC}	100, 500MΩ at 100V _{DC}	100, 500MΩ at 100V _{DC}	500MΩ at 100V _{DC}	500MΩ at 100V _{DC}
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	0.36~0.1uW	10, 50,100, 500 uW	10, 50,100, 500 uW	50,100 uW	0.36~1.0, 50,100 uW
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/Third Overtone	Fundamental/Third Overtone	Fundamental/Third Overtone

Mechanical Characteristics

Dimension (mm)	H _L	H	∅D (max)	∅d	P
Model					
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

