

FEATURES

- * Cost effective
- * Excellent aging
- * Wide frequency range
- * Excellent reliability

These products represent our selection of miniature tubular high frequency crystals. They feature outstanding shock/vibration resistance and environmental characteristics.



OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS		IDX-3X10	IDX-3X8/2X6	CONDITIONS
FREQUENCY RANGE	f_0	3.5MHz ~ 30MHz	6MHz~30MHz(fund), 30MHz~70MHz(3rd OT)	
FREQUENCY TOLERANCE	$\Delta f/f_0$		± 50 PPM	@+25°C
FREQUENCY VS. TEMP. CHARAC.	$\Delta f/f_0$		± 50 PPM	-10°C~+60°C
OPERATING TEMPERATURE RANGE	T_{OPR}		-10 ~ +60	°C
STORAGE TEMP. RANGE	T_{STG}		-40 ~ +85	°C
EQUIVALENT SERIES RESISTANCE	R		See table	
LOAD CAPACITANCE	C_L		16.0 pF typ. (Customer Specified)	pF
SHUNT CAPACITANCE	C_0		5.0 max.	pF
DRIVE LEVEL	D_L		50 μ W ~ 100 μ W	μ W
INSULATION RESISTANCE	IR		500M Ω min.	DC 100V ± 15
AGING (FIRST YEAR)	$\Delta f/f_0$		± 5 PPM max. ± 5 PPM	$\pm 25^\circ\text{C} \pm 3^\circ\text{C}$
SHOCK RESISTANCE		Drop test of 3 times on a hard board from 75 cm height or shock test of 3000G x 0.3ms x 1/2 sin wave x 3 directions		Conditions will vary depending on frequency

EQUIVALENT SERIES RESISTANCE/ MODE OF OSCILLATION

FREQUENCY MHz	EQUIVALENT SERIES RESISTANCE	MODE
3.5MHZ ~ 4MHZ	200 Ω MAX.	Fundamental
4MHZ ~ 6MHZ	150 Ω MAX.	
6MHZ ~ 10MHZ	100 Ω MAX.	
10MHZ ~ 30MHZ	50 Ω MAX.	
30MHZ ~ 36MHZ	100 Ω MAX.	3rd O/T
36MHZ ~ 70MHZ	80 Ω MAX.	

PACKAGE DIMENSIONS (mm)

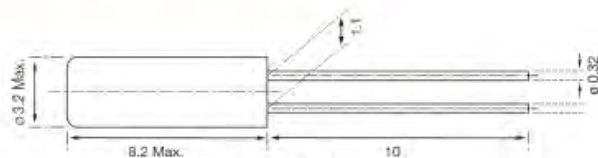


Figure 1) IDX38

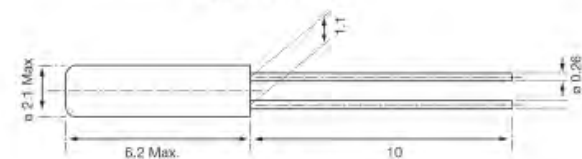


Figure 2) IDX26

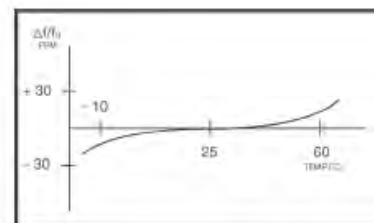


Figure 3) Frequency vs Temperature Curve