## Series MJX

## **Ceramic Surface Mount Crystals**

- Very low drive level
- Wide frequency range
- Tight stabilities

## Part Numbering Example: MJXD3N -XX.XXXX M

MJX		D,	3	Ņ	XX.XXXXM	
SERIES	OPERAT	ING TEMP.	STABILITY	GRADE	FREQUENCY	
	D=-401	to 85°C	$3 = \pm 50 \text{ ppm}$	N = Industrial Std	11.00 ~150.000	
	F= -55 t	o 105°C	$2 = \pm 30 \text{ ppm}$	M=MIL-STD-883B	MHz	
	G=-55 t	o 125°C	$1 = \pm 20 \text{ ppm}$ $0 = \pm 10 \text{ ppm}$			
Specificatio	ns:					
Frequency Rai	nge:	11.000 ~	150.000 MHz		_	
Operating Tem	perature:	-40°C -55°C	~ +85°C ~ +125°C			
Frequency Sta	bility:	±50 ppm	า		_	
		±30 ppn	n			
		±20 ppn	n			
		±10 ppr	m			
Frequency Tol	erance:	±50 ppr	m			
(at 25°C)		±30 ppm	า			
		±10 ppn	n			
Load Capacitance:		Standard	18pF or series.		<u></u>	
		Other val	ues are available	Э.	9	
Resistance:	Maximur	Maximum resistance corresponds to frequency.				
	See cha	See chart below.				
Standard:	Mode: F	Mode: Fundamental, 3rd or 5th Overtone				
	Shunt C	Shunt Capacitance: 7 pF Max				
	Aging: ±	Aging: ± 5 ppm/year				
	Drive Le	vel: 50 µW				

Note: Not all combinations of the above tolerances, stabilities, and temperature ranges are available. Consult the factory if your requirement is not standard.

## Resistance Chart: All resistances are maximum

EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE						
Frequency MHz		ESR (&)	Oscillation Mode			
11.0	~ 13.99	50	Fundamental			
14.0	~ 24.99	40	Fundamental			
25.0	~ 54.99	30	Fundamental			
55.0	~ 100.00	70	3rd Overtone			
100.0	~ 150.00	100	5th Overtone			

Environmental And Mechanical				
Mechanical Shock	Per MIL-STD-883 ,Method 2002 ,Cond.B			
Thermal Shock	Per MIL-STD-883 ,Method 1011 ,Cond.A			
Vibration	Per MIL-STD-883 ,Method 2007 ,Cond.A			
Seal	Per MIL-STD-883, Method 1014, Condition B & C			
Solderability	Per MIL-STD-883 ,Method 2003 ,Cond.A			

FRE Electronics Technologies Inc. www.fretechs.com sales@fretechs.com



