

PERFORMANCE CHARACTERISTIC
(Nominal)

INPUT:
 * Voltage to oscillator 28 ± 4 VDC
 * Voltage to oven 12, 24, 48, 115 V DC/AC
 * Current to oven booster, amps No Booster
 * Oven Power 11 Watts
 * Duty cycle, control thermostat Approximately 25% at 25°C.

OUTPUT:
 Volts across 5K ohms 1V
 Internal Impedance (approx.) 5K
HARMONIC DISTORTION 20%

STABILITY: Δf/f (max) versus:
 * Input voltage change of ±10% 10⁻⁷
 * Load Resistance change of ±10% 2.5 x 10⁻⁷
 * #Ambient temperature change -40°C. to +70°C. 5 x 10⁻⁷
 * #Vibration: 5 to 2000 cy, 10 G's 5 x 10⁻⁶
 Shock 100G for 8 ms. 5 x 10⁻⁶
 * #Coldstorage -65°C. 2.5 x 10⁻⁷
 * Humidity 95 to 100% No change if hermetically sealed
 * #Altitude 50,000 ft. No change if hermetically sealed
 * Time:
 Per 24 hours at time of shipment from source 5 x 10⁻⁷
 30 days after shipment 2.5 x 10⁻⁷
 90 days after shipment 1 x 10⁻⁷

FREQUENCY ADJUST: Trim range ±5 / -17 x 10⁻⁶

WARM-UP: Δf/f, starting at -30°C., t=0
 *t = 30 min. 10⁻⁶
 *t = 60 min. 2.5 x 10⁻⁷

*Certified performance data furnished on all asterisked items

TMC PART NO.	MFR PART NO.	TRIMMER	TERMINATION	FINISH	OPERATING VOLTAGES		PIN CONNECTIONS
					OVEN	OSC.	
NF 112-1	JKTO-23 100.64KC	3/8" TOP HOLE W/NEOPRENE PLUG.	OCTAL PLUG	GOLD ANOD. AL OUT. COV.	+28±4 V DC-AC	+28 ±4V DC REG. 1%	1- PILOT LIGHT 2- NC 3- OVEN HEATER 4- OSC + 5- INNER ANVIL GROUND 6- GND., OSC. 7- OVEN HEATER 8- OSC. OUTPUT
NF 112-2	JKTO-23 100.64KC	"	"	"	115V AC- DC	"	
NF112-3	JKTO-23 100.00KC	"	"	"	115V AC-DC	"	

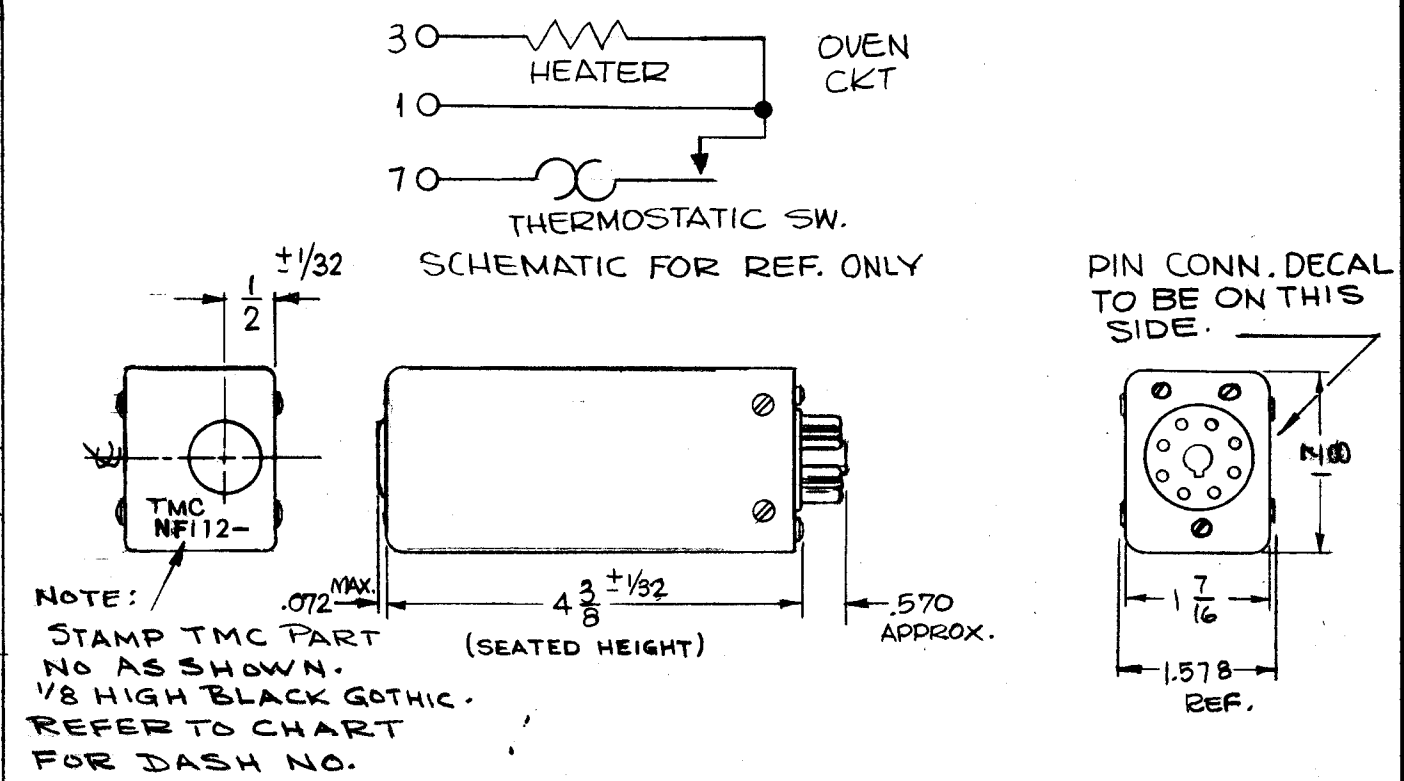
#NOT APPLICABLE TO MCG-1	MCG-2I		
	MCG-1		
	Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE	CODE	S401-96	
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NOTES

D
NF 112

REVISIONS

SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
X	EXPERIMENTAL RELEASE	3/13/64				
X1	1 X10 ⁻⁷ CLARIFIED	3/16/64				
O	ORIGINAL RELEASE FOR PRODUCTION	4/13/64	0	A.M.	@	
A	SCHEM. ADDED, PIN CONN. DECAL NOTE ADDED	7-20-64	11862	SRG	@	
B	DIMENSIONS CHGD & CLARIFIED ON PICTORIAL	6-24-64	16455	HLA		
C	NF112-3 ADDED P/N CHART, -2 ADDED P/O CHART	1-26-67	17716	WAD		
D	TOL. +5/-17 WAS ±20 (ON FREQ ADJ)	3-8-67	17934			



REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
AALTONEN LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH			OSCILLATOR, CRYSTAL, PLUG-IN	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES				
DECIMALS	TOLERANCES		FRACTIONS	
.X ± .05			± 1/64	
.XX ± .01			ANGLES	
.XXX ± .005			± 0° 30'	
DRAWN	TRAMIREZ	DATE	1-8-64	FINAL APPROVAL
CHECKED	A. Turner	DATE	2-19-64	
ELECT. DES.		DATE	2/19/64	NF 112
MECH. DES.		DATE	3-12-64	D
SHEET				REV. LTR.