

REVISIONS							
SYM	ZONE	DESCRIPTION	DATE	E.M.N.Q.	DRAFT	CHKD	APPD
X		EXPERIMENTAL RELEASE	4/2/69	X	KH		
X1		NOTE 10 ON SPEC REVISED	5/6/69	X1	JL	JL	
Ø		ORIGINAL RELEASE FOR PRODUCTION	5/8/69		W		
A		REV NOTE 6, DELETE -75 dB FROM CHART	2-23-70	19758	KD	H	O.P.

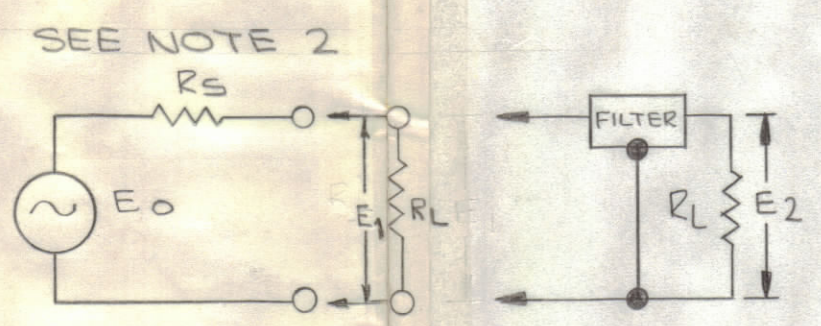
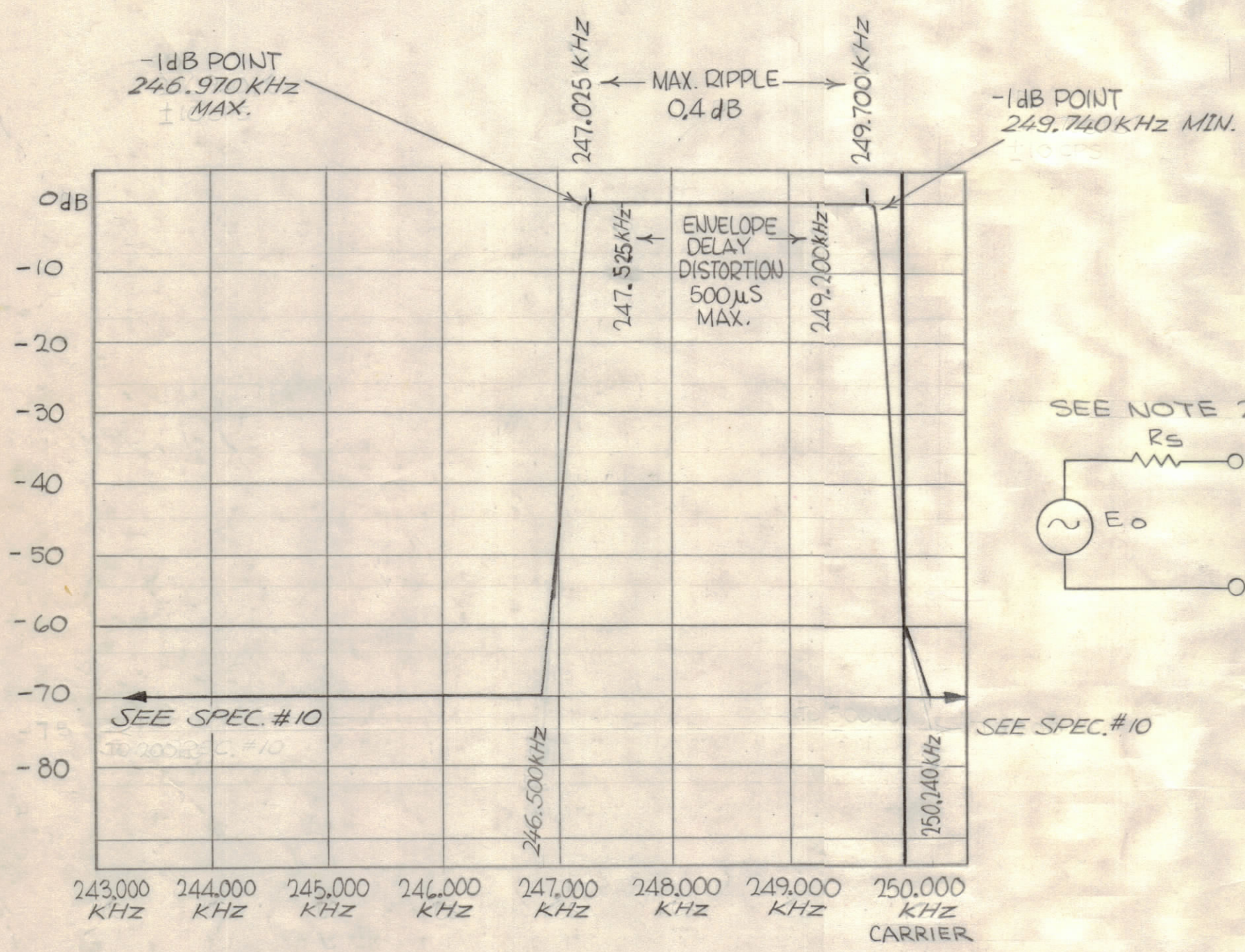
SPECIFICATIONS

1. TYPE: INNER, LOWER SIDEBAND
2. dB MEASUREMENTS: ALL dB MEASUREMENTS ARE RELATIVE TO MAXIMUM SIGNAL RESPONSE IN THE PASSBAND
3. CARRIER FREQUENCY: 250 kHz
4. CARRIER SUPPRESSION: AT LEAST 60 dB
5. -1dB POINTS: 246.970 kHz MAX & 249.740 kHz MIN
6. -70dB POINTS: NOT LOWER THAN 246.500kHz & NOT HIGHER THAN 250.240 kHz
7. INSERTION LOSS 4dB MAX
8. SOURCE AND LOAD IMPEDANCE: 500 ±5% OHMS
9. RIPPLE: 0.4 dB MAX BETWEEN 247.025 kHz AND 249.700 kHz
10. ALL SPURIOUS RESPONSES AT LEAST 65 dB DOWN FROM 200kHz TO 300kHz
11. OPERATING TEMPERATURE: 0° TO 65°C
12. MAX. ENVELOPE DELAY DISTORTION: 500 μS BETWEEN 247.525 kHz AND 249.200 kHz WHEN TESTED WITH CORRESPONDING EQUALIZER
13. THIRD ORDER, IN-BAND INTERMODULATION DISTORTION WILL BE AT LEAST 65 dB DOWN FROM THE REFERENCE LEVEL OF EITHER OF TWO EQUAL 30mv TONES IN THE FILTER PASSBAND, SELECTED IN A MANNER SUCH THAT THE THIRD ORDER-PRODUCT FALLS IN THE FILTER PASSBAND.
14. MAXIMUM SIGNAL INPUT: 3 VOLTS rms
15. NON-OPERATING TEMP RANGE: -62°C TO +75°C
16. PEAK SHOCK CAPABILITY: 20 G WITHIN A PERIOD OF 10 MILLISECONDS APPLIED ALONG THREE MUTUALLY PERPENDICULAR AXES
17. VIBRATION CAPABILITY: 5 Hz TO 50 Hz AT AN AMPLITUDE OF 1.3 G

NOTE 1 CHANNEL DESIGNATION REFERS TO 250 kHz. FURTHER SIDEBAND INVERSIONS MUST BE TAKEN INTO ACCOUNT IN DETERMINING THE FINAL CHANNEL DESIGNATION.

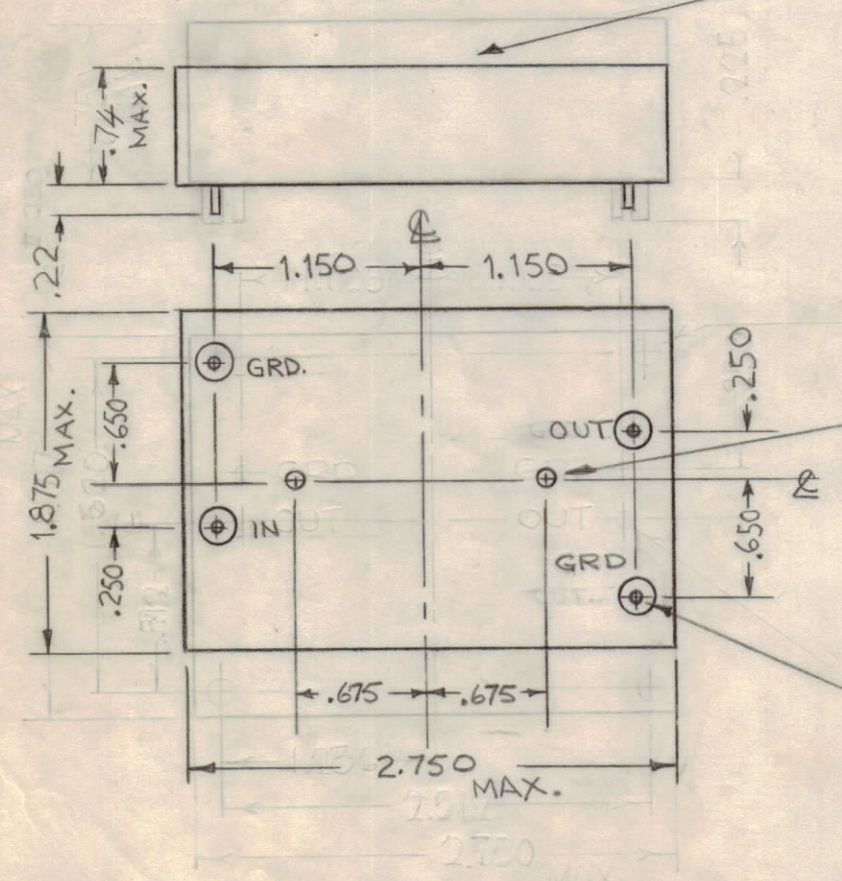
2 INSERTION LOSS IS DEFINED AS  $20 \log A$ , WHERE  $A = |E_1| / |E_2|$ ,  $R_S$  = SOURCE IMPEDANCE,  $R_L$  = LOAD IMPEDANCE SEE SKETCH.  $E_0$  IS FIXED AT ANY FREQUENCY IN THE PASSBAND OF THE FILTER

MARKING PROCESS: AS PER TMC SPECIFICATION S727  
 LETTERING: 1/8 HIGH BLACK GOTHIC, LOCATED AS SHOWN



LETTERING AND TMC P/N W/LATEST REV LETTER

THE TECHNICAL MATERIEL CORP  
 MAMARONECK NEW YORK  
 FX 291



MECHANICAL SPEC  
 CASE:  
 MATERIAL: 24 GA (.022) CRS STEEL  
 DIMENSIONS: AS SHOWN  
 FINISH: POWDER BLASTED NICKEL  
 MARKING: AS INDICATED  
 UNIT TO BE HERMETICALLY SEALED

TERMINALS— 4 PL  
 STEEL WIRE .040 DIA OR EQUIVALENT,  
 GLASS OR TEFLON INSULATION

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.

REF.: MSAR-5

QTY REQ	ITEM	PART NO.	DESCRIPTION	SYMBOL
BILL OF MATERIAL				
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK				
BANDPASS FILTER, CHANNEL B1				
MODE MSAR-5				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES		±1/64	±.005	±1/2°
MATERIAL	CHECKED	DATE	CODE 82679	
FINISH	DRAWN	DATE		
APPROVED FOR BUSHIPS		DATE		
CONTRACT NO.		DATE		
			SIZE C	DWG. NO. FX 291
			SCALE	SHEET OF