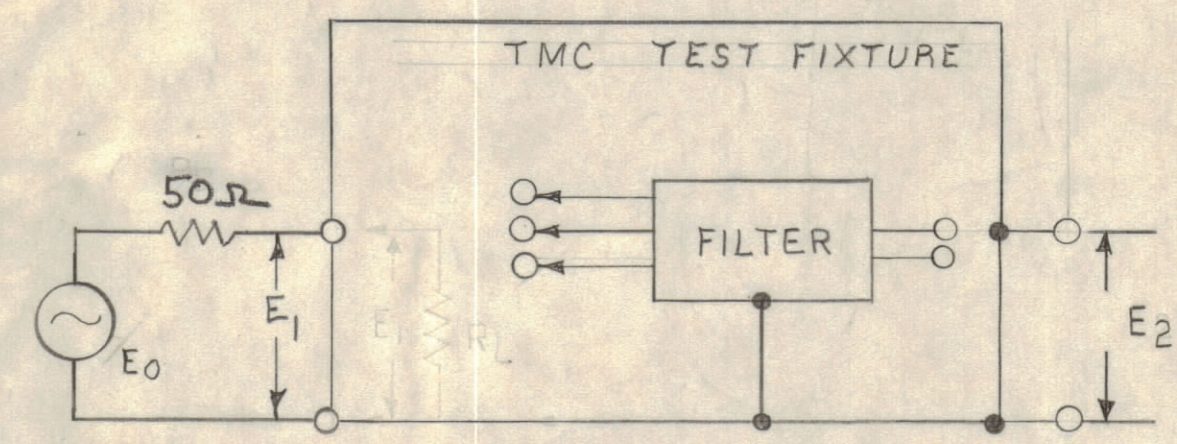


TMC P/N	CENTER FREQ. (f ₀)	-60dB POINTS		0.1dB RIPPLE LIMITS				OVERALL FILTER 1.0dB RIPPLE				SPURIOUS -60dB LIMITS		25μs ENVELOPE DELAY & -60dB INTERMOD LIMITS			
		MIN (NOT LESS THAN)	MAX (NOT MORE THAN)	FROM	TO	FROM	TO	FROM	TO	FROM	TO	MAX (NOT MORE THAN)	MIN (NOT LESS THAN)				
		FX271-0.250	0.250 MHz	150	350 kHz	.243960	.246750	.246960	.249750	.250250	.253040	.253250	.256040	243.900	256.100 kHz	.150 TO .500 MHz	244 TO 256 kHz
FX271-0.625	0.625 MHz	525	725 kHz	.618960	.621750	.621960	.624750	.625250	.628040	.628250	.631040	618.900	631.100 kHz	200 TO 1.250 MHz	619 TO 631 kHz		
FX271-1.250	1.250 MHz	1.050	1.450 kHz	1.243960	1.246750	1.246960	1.249750	1.250250	1.253040	1.253250	1.256040	1243.900	1256.100 kHz	200 TO 2.500 MHz	1.244 TO 1.256 kHz		
FX271-2.500	2.500 MHz	2.100	2.900 MHz	2.493960	2.496750	2.496960	2.499750	2500250	2503040	2503250	2506040	2493.900	2506.100 kHz	200 TO 5.000 MHz	2.496 TO 2.506 MHz		
FX271-5.000	5.000 MHz	4.100	5.900 MHz	4.993960	4.996750	4.996960	4.999750	5000250	5003040	5003250	5006040	4993.900	5006.100 kHz	200 TO 10.000 MHz	4.996 TO 5.006 MHz		

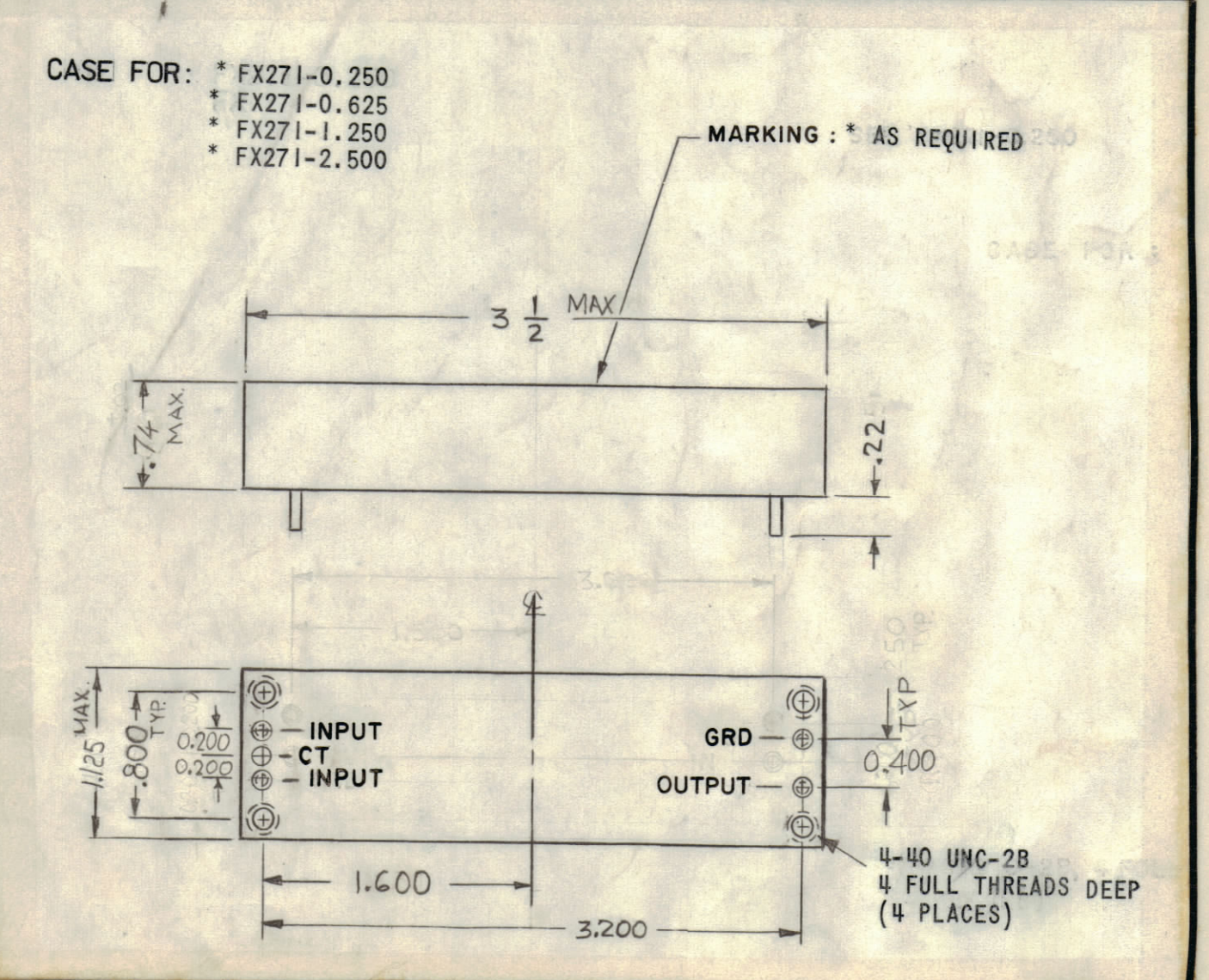
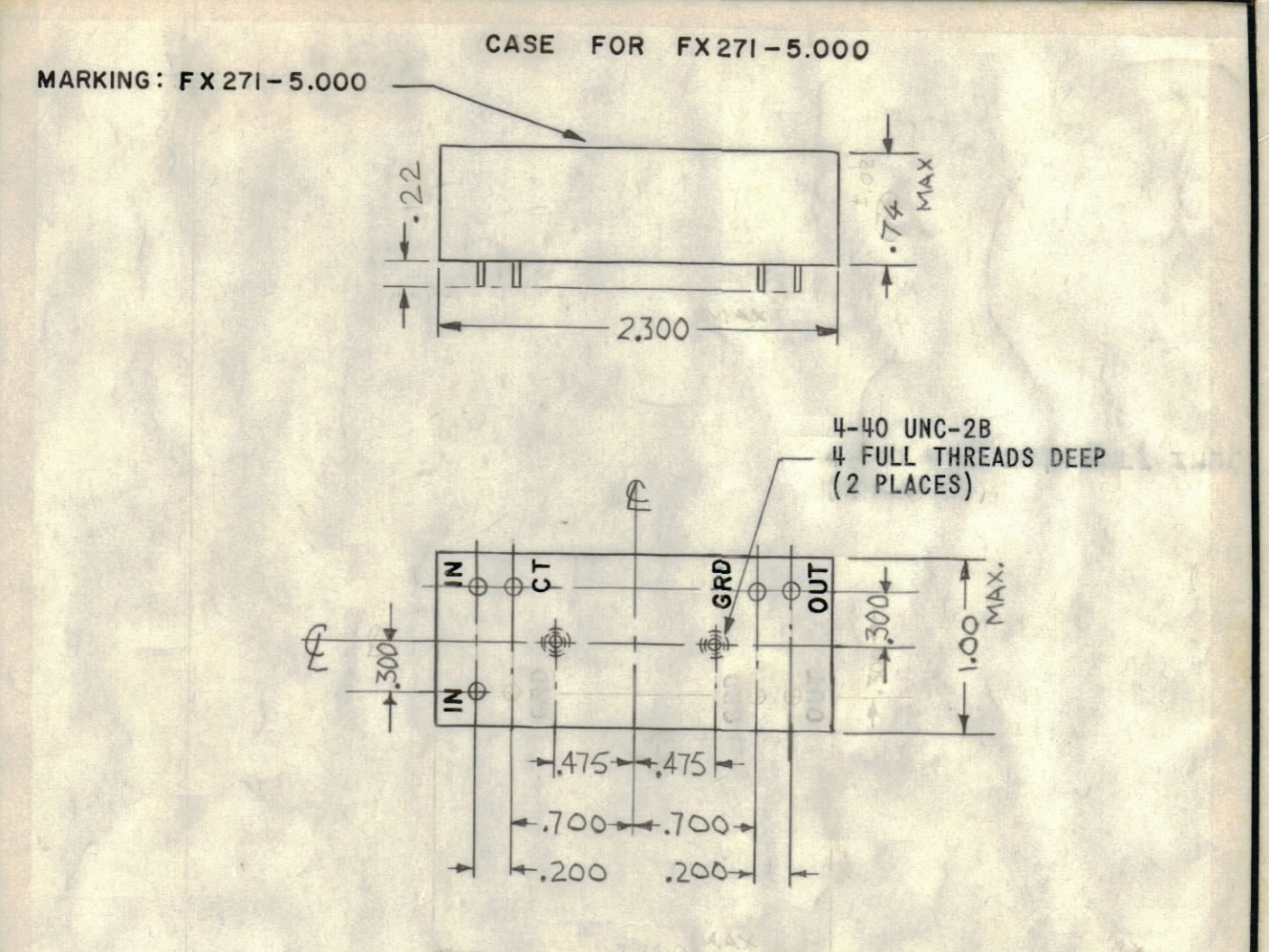
REVISIONS									
E.M.N.O.	DRAFT	CHKD	ZONE	LTR	DESCRIPTION	DATE	APPROVED		
19804	CV	WLB		G	REVISED & REDRAWN ON D SIZE	4/9/70	RRH/OP		
20297	RJ	WLB		H	CHG. DIM. TO 1.125, #1 PICT NOTES, DELE PICT #2 & NOTES	3-24-71	RRH/OP		

- ELECTRICAL SPECIFICATIONS**
- TYPE: SYMMETRICAL, BALANCED INPUT, SINGLE ENDED OUTPUT
 - dB MEASUREMENTS: ALL dB MEASUREMENTS ARE RELATIVE TO MAXIMUM SIGNAL RESPONSE IN THE PASSBAND.
 - CENTER FREQUENCIES (f₀) AVAILABLE: 0.250, 0.625, 1.250, 2.500 AND 5.000 MHz
 - 1dB POINTS: NOT LESS THAN f₀ +6.100 KHz AND NOT MORE THAN f₀ -6.100 KHz
 - 60dB POINTS: SEE CHART
 - INSERTION LOSS (±1dB): FX271-0.250 4dB, ALL OTHERS 10 dB.
 - SOURCE AND LOAD IMPEDANCE: SEE NOTE 2
 - DELETED
 - RIPPLE: SEE CHART
 - SPURIOUS RESPONSES: SEE CHART
 - OVERALL DIFFERENTIAL ENVELOPE DELAY: LESS THAN 25 MICROSECONDS BETWEEN f₀ AND f₀ ± 6 KHz
 - MAXIMUM INPUT SIGNAL LEVEL: 3 VOLTS RMS'
 - THIRD ORDER, IN-BAND (f₀ ± 6 KHz) INTERMODULATION DISTORTION WILL BE AT LEAST 60 dB BELOW THE REFERENCE LEVEL OF EITHER OF TWO EQUAL 100 mv TONES IN THE FILTER PASSBAND. SELECTED IN A MANNER SUCH THAT THE THIRD ORDER PRODUCTS FALL IN THE FILTERS PASSBAND.
 - OPERATING TEMPERATURE: 0° TO 65°C
 - STORAGE TEMPERATURE: -62°C TO +75°C
 - SHOCK CAPABILITY: 20 G IN 10 MILLISECONDS APPLIED ALONG THREE MUTUALLY PERPENDICULAR AXES
 - VIBRATION CAPABILITY: 5 CPS TO 50 CPS AT AN AMPLITUDE OF 1.3G

I. INSERTION LOSS MEASUREMENTS



INSERTION LOSS IS DEFINED AS 20 LOG A WHERE A = |E₂| / |E₁|. E₀ IS FIXED AT CENTER FREQUENCY IN THE PASSBAND OF THE FILTER. SINCE FILTERS ARE INTERNALLY TERMINATED, SET E₁ TO 77.5 MV. E₂ MUST BE GREATER THAN 120.0 MV.



- MECHANICAL SPECIFICATIONS**
- CASE MATERIAL: 24GA (.024) CRS
 - DIMENSIONS: AS SHOWN
 - FINISH: POWDER BLASTED NICKEL OR BLACK EPOXY INK
 - MARKING: AS INDICATED (BLACK EPOXY INK) OR WHITE EPOXY INK
 - UNIT TO BE HERMETICALLY SEALED
 - TERMINALS: (4) STEEL WIRE .040 DIA OR EQUIVALENT
 - INSULATION: GLASS OR TEFLON
 - UNLESS OTHERWISE SPECIFIED: MECHANICAL SPEC AND MARKING ARE THE SAME FOR ALL CASES

MARKING: THE TECHNICAL MATERIEL CORP
MAMARONECK NEW YORK
FX 271-0.250

QTY. REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
LIST OF MATERIAL				
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK				
FILTER, ROOFING HFRR-4				
FINAL APPROVAL RR Hay		DATE 11/23/66		
MECH. DES.		DATE		
ELECT. DES.		DATE		
CHECKED JL		DATE 10/26/66		
DRAWN RME		DATE 10/17/66		
MATERIAL			SIZE	CODE IDENT NO. DWG NO.
FINISH			D	82679
			SCALE	SHEET OF
				FX 271
				ISSUE H

HFRR-4		
QTY / UNIT	MODEL USED ON	ASS'Y NO.
APPLICATION		
CODE		
MATERIAL		
FINISH		

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