DATE 8/21/61
SHEET 1 OF 2

M. Gellman COMPILED
CHECKED
APPROVED

TMC SPECIFICATION NO. S -583

TITLE: CRYSTAL FILTERS

A

Temperature Range - 0-70° C
All db, measurements are relative to the passband.
Input impedance on all crystal filters - 300 ohms.

Output impedance: to grid

Return lobes or spurious: 60 db or greater

Container size - 1 11/32 x 1 5/16 x 4" max.

7½ Kc upper and lower sidebands asymetrical

Bandwidth at 3 db from 250 Kc carrier 7½ Kc.

250 Kc carrier at 30 db.

Sharp slope at + 30 db should be less than + 225 cycles
either side of 250 Kc.

Trailing slope shall be less than 13 Kc at 60 db down or greater

Ripple through passband shall be less than + 1½ db.

Output voltage gain from filter 14 db. + 1 db.

3.5 Kc upper and lower sideband asymetrical filter;

Bandwidth at 3 db from 250 Kc - 3.5 Kc.

250 Kc at 30 db sharp slope at + 30 db shall be less than + 140

cycle. Trailing slope shall be less than 5.5 Kc at 60 db or greater

250 Kc - ripple + 3/4 db.

Output voltage gain from filter 3 db + 1 db.

6 Kc asymetrical upper and lower sideband;

Bandwidth at 3 db from 250 Kc = 6 Kc

250 Kc at 30 db sharp slope + 30 from carrier shall be less

than±175 cycl s.

Trailing slope shall be 11 Kc or l ss fr m 250 Kc at 60 db. or greater

Ripple shall be less than + 1 db.

Output voltage gain from filter 14 db +1 db.

DATE 8/21/61
SHEET 2 OF 2

M. Gellman
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TMC SPECIFICATION NO. S-583

A

TITLE: CRYSTAL FILTERS

6 Kc symetrical:

Ripple through passband + ½ db

250 Kc at center of passband.

Bandwidth at 3 db = 6 Kc

S/F 1.6:1 or less 6-69 db.

Output voltage gain from filter 14 db + 1 db.

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1 Kc symetrical:

250 Kc center of passband

Ripple + 1 db

Bandwidth at 3 db = 1 Kc + 5%

S/F 2-1 or less 6-60 db.

Output voltage gain from filter 14 db + 1 db.

REVISION SHEET

THE TECHNICAL MATERIEL CORP.
MAMARONECK   NEW YORK

S-583 CRYSTAL FILTERS

MODEL _____   PROJECT NO _____

DATE	REV.	PAGE	EMN#	DESCRIPTION	CHK.	APP.
8/23/61	A	1,2	5488	Completely Revised and Retyped		
1/3/62	B		6137	OBSOLETE All Info contained herein has been trans-		
				ferred to the dwg's affected		