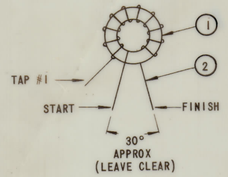
REVISIONS							
ZONE	LTR	DESCRIPTION	DATE	E.M.N.NO	DRAFT	CHKD	APPD
	X2	COMPLETELY REVISED & REDRAWN	11/14/68	X2	CU	RG	
	Ø	ORIGINAL RELEASE FOR PROD.	11/5/68	Ø	RG		
	A	CHART REVISED	9/11/69	19516	CU	RG	RG
	B	ADD. -11A – -11F	11/4/71	20470	GE	RJ	TC

TMC P/N	WINDING DATA: TURNS REQD	WINDING DATA: TAP #1 LOOP NO	WINDING DATA: SPACING	MATERIAL APPLICABLE: ITEM 1 CORE	ITEM 2 WIRE	ITEM 3 CAPACITOR	ITEM 4 RESISTOR	PRELIMINARY ELECTRICAL SPECIFICATIONS: INDUCTANCE SEE PROCEDURE #1	INDUCTANCE VALUE IN µH	INDUCTANCE TOL IN µH	UNLOADED Q VALUE	UNLOADED Q TOL %	UNLOADED Q FREQ MHz	RESONATING CAPACITOR	FINAL ELECTRICAL SPECIFICATIONS: INPUT FREQ Mc ±5%	-3dB POINTS LOW FREQ Mc ±5%	-3dB POINTS HIGH FREQ Mc ±5%	INSERTION LOSS ±3dB	INPUT m VOLTS RMS	OUTPUT m VOLTS RMS ± 3dB
TZ223-1A	204	4	CLOSE	C1127-2	W1141-40-9	CM15C470J03	RC07GF683J	3	114.9	± 3.45	95	±10	2.0	APPROX 50pF	1.512	1.485	1.529	23.5	470	32
-2A	149	4	↓	↑	W1141-38-9	↓	RC07GF823J	3	64.6	± 1.94	130	↓	2.8	↓	1.989	1.965	2.004	27.5	750	32
-3A	109	3	↑	↓	W1141-36-9	↑	RC07GF563J	3	35.1	± 1.05	142	↑	3.8	↑	2.701	2.671	2.724	25.0	560	32
-4A	82	3	CLOSE	↑	W1141-34-9	↓	RC07GF104J	3	18.8	± 0.564	150	↓	5.2	↓	3.746	3.720	3.766	19.5	300	30
-5A	59	3	EVENLY	↓	W1141-32-9	↑	RC07GF154J	3	10.3	± 0.309	170	↑	7.0	↑	5.061	5.029	5.087	14.0	160	32
-6A	45	2	↑	↑	W1141-30-9	↓	RC07GF683J	3	5.85	± 0.175	184	↓	9.3	↓	6.670	6.631	6.703	18.0	250	32
-7A	33	2	↓	↓	W1141-30-9	↑	↓	3	3.24	± 0.097	182	↑	12.5	↑	8.929	8.892	8.959	12.0	125	32
-8A	23	2	↑	↑	W1141-28-9	↓	↑	4	1.82	± 0.0546	183	↓	16.7	↓	12.242	12.192	12.286	11.0	110	30
-9A	17	1	↓	↓	W1141-24-9	↑	↓	4	1.00	± 0.030	176	↑	22.5	↑	16.202	16.141	16.242	16.0	200	30
-10A	13	1	EVENLY	C1127-2	W1141-22-9	CM15C470J03	↓	4	0.563	± 0.0169	136	±10	30.0	APPROX 50pF	22.180	22.087	22.246	11.5	115	30
-1B	SAME AS 1A					CM15C330J03	↓	SAME AS 1A							SAME AS 1A					
-2B	SAME AS 2A					↓		SAME AS 2A							SAME AS 2A					
-3B	SAME AS 3A							SAME AS 3A							SAME AS 3A					
-4B	SAME AS 4A							SAME AS 4A							SAME AS 4A					
-5B	SAME AS 5A							SAME AS 5A							SAME AS 5A					
-6B	SAME AS 6A							SAME AS 6A							SAME AS 6A					
-7B	SAME AS 7A							SAME AS 7A							SAME AS 7A					
-8B	SAME AS 8A							SAME AS 8A							SAME AS 8A					
-9B	SAME AS 9A							SAME AS 9A							SAME AS 9A					
-10B	SAME AS 10A					CM15C330J03	↓	SAME AS 10A							SAME AS 10A					
-11A	345	5	CLOSE	C1127-2	W1104-343SCQS	CM15C431G03		3	365	± 2%	70	±10%	475KHZ		405 KHZ	395 KHZ	415 KHZ			
-11B	↑	↑	↑	↑	↑	CM15C391G03		↑	↑	↑	↑	↑	↑		420	410	430			
-11C	↓	↓	↓	↓	↓	CM15C361G03		↓	↓	↓	↓	↓	↓		438	425	450			
-11D						CM15C321G03									460	445	475			
-11E						CM 15C271G03									493	470	515			
-11F	345	5	CLOSE	C1127-2	W1104-343SCQS	CM 15C241G03		3	365	± 2%	70	±10%	475KHZ		533 KHZ	510 KHZ	565 KHZ			



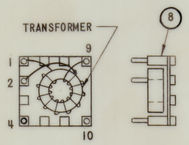
TRANSFORMER WINDING DETAIL

PROCEDURE (1) WINDING

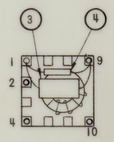
1. WIND REQUIRED NUMBER OF TURNS AS SHOWN, CLOSE OR EVENLY SPACED 330° AROUND CORE.
2. TAP AS REQUIRED.
3. ADD OR SUBTRACT TURNS TO MEET INDUCTANCE.
4. SPREAD TURNS OR PUSH TOGETHER TO MEET INDUCTANCE.
5. SECURE WINDING LEADS WITH ITEM 7
6. BAKE FOR 1/2 HOUR AT 180°F.
7. COAT CORE AND WINDING WITH ITEM 7 AND BAKE FOR 1/2 HOUR AT 150°F.
8. LEADS TO BE 1-1/4" LONG, STRIP AND TIN 1".
9. TEST L AND Q AS PER PRELIMINARY ELECTRICAL SPECIFICATIONS. USING Q METER FOR -11A THRU -11F

PROCEDURE (2) ASSEMBLY

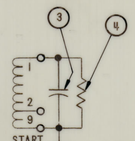
ASSEMBLE AS SHOWN



TRANSFORMER WIRING



ITEMS 3 & 4 WIRING

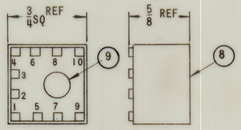


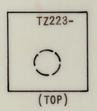
SCHEMATIC

DETAIL A

PROCEDURE (3) FINAL ASSEMBLY

1. ASSEMBLE HEADER AND PARTS AND WIRE AS PER APPLICABLE DETAIL.
2. ASSEMBLE SHELL WITH HEADER ASSEMBLY.
3. POTTING, ITEM 9. AS PER SPEC S10149.
4. STAMP TMC PART NUMBER AS SHOWN 3/32 HIGH BLACK GOTHIC.





(TOP)

PROCEDURE (4) FINAL TEST

NOTE: COUNTER TO BE USED FOR FREQUENCY MEASURES ONLY. DO NOT USE DURING TEST.

1. SET GENERATOR TO INPUT FREQUENCY (SEE CHART) PEAK GEN.
2. SET INPUT VOLTS TO (SEE CHART).
3. MEASURE 3dB POINTS (SEE CHART).
   a. LOW FREQ. (SEE CHART) ±5%.
   b. HIGH FREQ (SEE CHART) ±5%.
4. MEASURE INSERTION LOSS

INSERTION LOSS = V2 - VI

QTY. REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
X	10	BS100	SOLDER, TIN ALLOY	
X	9	GL10005-3110-H	ENCAPSULANT	
1	8	BP10002-1	HEADER WITH SHELL (MODU-CON)	
X	7	GL102	Q MAX	
1	6	SEE CHART	RESISTOR	
1	5	↓	COIL	
1	4		RESISTOR	
1	3		CAPACITOR	
X	2		WIRE	
1	1	SEE CHART	CORE	

LIST OF MATERIAL

	SME-6 MFE-1	A4647
QTY / UNIT	MODEL USED ON	ASS'Y NO.
APPLICATION		
	CODE	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES

TOLERANCES ON
DECIMALS .X ± .05, .XX ± .01, .XXX ± .005
FRACTIONS ± 1/64
ANGLES ± 0° 30'

MATERIAL

FINISH

FINAL APPROVAL	Rose	DATE
MECH. DES.		DATE
ELECT. DES.	Jacob Zaiger	DATE 11-4-68
CHECKED		DATE 11/14/68
DRAWN	L. Yates	DATE 10/28/68

THE TECHNICAL MATERIEL CORP.
MAMARONECK, NEW YORK

TRANSFORMER, NETWORK, RF
PLUG-IN

SIZE	CODE IDENT. NO.	DWG NO.	ISSUE
D	82679	TZ 223	B
SCALE		SHEET	OF

TZ 223 B

PCI-10-170 (10-66)