

XMTR CONV MODULE, 2-4MC

MODEL TTRT-1

REV C

**TITLE**

USED ON  
MODEL SECTION  
TTR-10

**LIST SECTIONS**

1. SUPPORTING NOTES
2. SUPPORTING LISTS
3. ELECTRICAL/MECHANICAL
4. SUPP ASSY/REF DWGS
5. SPECIFICATIONS
6. LOOSE ITEMS
7. PARTS PECULIAR

**SHEET NO.**

SEE BELOW  
NONE REQ  
1-8  
9  
10  
NONE REQ  
NONE REQ

**LAST SYMBOLS**

C534		XY502
L508	S501	XZ501
Q507	T505	Y502
R525	W502	Z501

COMPILED	J. FERRERI
CHECKED	L. GABEL
APPROVED	T. AALTONEN
FNL APPR	<i>L. Gabel</i>
ISS DATE	9-15-64

**MISSING SYMBOLS**

C528  
R508

NOTE 1. THE FOLLOWING SYMBOL, #, IN THE REMARKS COLUMN INDICATES THAT THE PART NUMBER IMMEDIATELY FOLLOWING IT IS THE TMC PROPRIETARY MANUFACTURING DRAWING FOR THE CORRESPONDING NUMBER IN THE PART NUMBER COLUMN.

NOTE 2. ALL ITEMS REFERENCED TO THIS NOTE SHALL BE USED WHEN XTAL OVENS ARE REQUIRED BY CUSTOMER.

NOTE 3. ALL ITEMS REFERENCED TO THIS NOTE SHALL BE USED WHEN NO XTAL OVENS ARE REQUIRED BY CUSTOMER.

MATERIAL LIST / NUMERICAL PARTS LIST		REV.	A	B	C											MODEL:	TTRT-1			SHEET 1 OF 10	
PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS														
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT																	
A3362-1	PC BD,MKG	A3362-2		1	1																
BS100	SOLDER,TIN ALY	A3223-15																			
		A3223-16																			
		A3223-17																			
		A3223-18																			
		A3223-19																			
		A3362-2																			
CC20RH020C	CAP.,FXD,CER	A3362-2		1	1	C517															
CC100-16	CAP.,FXD,CER	A3362-2		1		C523															
		A3362-2		1		C525															
		A3362-2		1		C526															
		A3362-2		1		C527															
		A3362-2		1		C529															
		A3362-2		1		C530															
		A3362-2		1	7	C532															
CC100-25	CAP.,FXD,CER	A3362-2		1		C508															
		A3362-2		1		C511															
		A3362-2		1		C515															
		A3362-2		1		C516															
		A3362-2		1		C518															
		A3362-2		1	6	C520															
CC100-33	CAP.,FXD,CER	A3362-2		1		C519															
		A3362-2		1		C521															
		A3362-2		1		C522															
		A3362-2		1		C531															
		A3362-2		1		C533															
		A3362-2		1	6	C534															
CE107-1	CAP.,FXD,ELECT.	A3362-2		1	1	C524	TANT/INS														
CI115	CORE,TOROID	A3223-15		1	1																

**MATERIAL LIST /  
NUMERICAL PARTS LIST**

REV.

A B C

MODEL: TTRT-1

SHEET 2 OF 10

PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
CI127-3	CORE, TOROID	A3223-16		1			
		A3223-17		1			
		A3223-18		1			
		A3223-19		1	4		
CL140-5	COIL, RF, FXD	A3362-2		1		L502	.560MH
		A3362-2		1		L503	.560MH
		A3362-2		1		L504	.560MH
		A3362-2		1		L505	.560MH
		A3362-2		1		L506	.560MH
		A3362-2		1		L507	.560MH
		A3362-2		1	7	L508	.560MH
CL240-100	COIL, RF, FXD	A3362-2		1	1	L501	
CM15B050J	CAP., FXD, MICA	A3362-2		1	1	C506	
CM15B101J	CAP., FXD, MICA	A3362-2		1	1	C509	
CM15B181K	CAP., FXD, MICA	A3362-2		1	1	C512	
CM15B330J	CAP., FXD, MICA	A3362-2		1		C513	
		A3362-2		1	2	C514	
		A3362-2		2	2		
CM15B820J	CAP., FXD, MICA	A3362-2		1	1	C510	
CM20C681J	CAP., FXD, MICA	A3362-2		1	1	C507	
CR110-1-FREQ	CU, QTZ, OVEN	A2842		1		Y501	NOTE 2
OR		A2842		1	2	Y502	NOTE 2
CR110-3-FREQ	CU, QTZ, AMBIENT	A2842		1		Y501	NOTE 3
		A2842		1	2	Y502	NOTE 3

THE TECHNICAL MATERIEL CORPORATION

MAMARONECK, NEW YORK

MATERIAL LIST / NUMERICAL PARTS LIST		REV.	A	B	C											MODEL:	TTRT-1			SHEET	3	OF	10
PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS																
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT																			
CT103-1	CAP., VAR, AIR	A3362-2		1	C502 C503 C504 C505	3.2-50UUF 3.2-50UUF 3.2-50UUF 3.2-50UUF																	
		A3362-2		1																			
		A3362-2		1																			
		A3362-2		1			4																
CT104-3	CAP., VAR, AIR	A3362-2		1	1	C501																	
FS118-1	LATCH, SNAPSLIDE	MS3370		2	2																		
FS119-2	LATCHGUIDE, SNPSL	MS3370		2	2																		
FS120-1	POST, SNAPSLIDE	MS3370		2	2																		
FW04HBN	WASH., FLAT	A3362-2		2	2																		
FW101-1	WASH., NM, N	A3362-2		10	10																		
GL102	ADHESIVE-Q DOPE	A3223-15																					
		A3223-16																					
		A3223-17																					
		A3223-18																					
		A3223-19																					
HD100	HEAT SINK	A3362-2		1	1																		
JJ219-18-9	JACK, TIP	MS3414		6	6																		
LD1326/MS3379	CHAS, WRPARD	A2842		1	1																		
LD1333/MS3370	PNL, FRONT	A2843		1	1																		
LD1342/MS3414	BRKT, XTAL SOC	A3362-2		1	1	XY501, 502, XZ501																	
LWE04MRN	WASH., LK, EXT	A2841		2																			
		A3362-2		13	15																		

**MATERIAL LIST /  
NUMERICAL PARTS LIST**

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MODEL: TTRT-1

SHEET 4 OF 10

PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
LWI04MRN	WASH., LK, INT.	A3362-2		1	1		
LWI08MRN	WASH., LK, INT	A2843		1	1		
LWI37MRN	WASH., LK, INT	A3362-2		1	1		
MP126-1	KNOB, THD	A2843		1	1		
MS3370	PNL, FRONT	LD1333		1	1		MACH
MS3372	BRKT, MTG, CAP.	A3362-2		1	1		
MS3377	PL, SD, L/R	A2841		2	2		
MS3379	CHAS, WRPARD	LD1326		1	1		MACH
MS3380	SHIELD, RF	A3362-2		3	3		
MS3414	BRKT, XTAL SOC	LD1342		1	1		MACH
MS3446	PL, XTAL RET.	A2842		1	1		NOTE 3
MS3560	SHIELD, RF OUT	A3362-2		1	1		
MS4401	BRK'T RET.	A2841		1	1		
NP559	PL, ID, FREQ	A2841		1	1		
NP563	PL, ID, COMM	A2841		1	1		
NT129-440-4	NUT, PLN, SPLINE	MS3379		12			
		MS3414		2			
		MS4401		4	18		
NT137-0440	NUT, PLN, HEX, N	A3362-2		10	10		
NTH0440BN6	NUT, PLN, HEX	A3362-2		11	11		
NTH2532BN10	NUT, PLN, HEX	A3362-2		1	1		
NTH3732BN18	NUT, PLN, HEX	A3362-2		1	1		

MATERIAL LIST / NUMERICAL PARTS LIST		REV.	A B C												MODEL: TTRT-1				SHEET 5 OF 10		
			PART NO.		DESCRIPTION ELECTRICAL/MECHANICAL		ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS		REMARKS								
				USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT															
OC100-1 OR	OVEN, XTAL, 12VDC	A2842		1	1	Z501			NOTE 2												
OC100-2 OR	OVEN, XTAL, 24VDC	A2842		1	1	Z501			NOTE 2												
OC100-3 OR	OVEN, XTAL, 115VAC	A2842		1	1	Z501			NOTE 2												
OC100-4	OVEN, XTAL, 32VDC	A2842		1	1	Z501			NOTE 2												
PC102-1	PC BD, ETCHING	PC102-2		1	1																
PC102-2	PC BD, MACH	PC102-3		1	1																
PX104-2-022	INS SLVG, SZ 24	A3362-2		2	2				YEL												
PX104-3-022	INS SLVG, SZ 24	A3362-2		2	2				RED												
PX104-4-022	INS SLVG, SZ 24	A3362-2		2	2				GRN												
PX104-6-022	INS SLVG, SZ 24	A3362-2		2	2				BLU												
PX104-7-022	INS SLVG, SZ 24	A3362-2		3	3				GY												
PX370-3-7	INS SLVG-TEF	A3362-2		1	1																
PX829-1	PAD, TSTR MTG	A3362-2		7	7																
RC20GF102J	RES, FXD, COMP	A3262-2		1		R501															
		A3362-2		1		R504															
		A3362-2		1	3	R507															
RC20GF123J	RES, FXD, COMP	A3362-2		1	1	R521															
RC20GF183J	RES, FXD, COMP	A3362-2		1		R509															
		A3362-2		1	2	R510															

**MATERIAL LIST /  
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MODEL: TTRT-1

SHEET 6 OF 10

PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
RC20GE241J	RES, FXD, COMP	A3362-2		1	1	R517	
RC20GF222J	RES, FXD, COMP	A3362-2		1		R518	
		A3362-2		1	2	R520	
RC20GF273J	RES, FXD, COMP	A3362-2		1		R502	
		A3362-2		1	2	R505	
RC20GF331J	RES, FXD, COMP	A3362-2		1		R514	
		A3362-2		1		R515	
		A3362-2		1		R519	
		A3362-2		1	4	R525	
RC20GF390J	RES, FXD, COMP	A3362-2		1	1	R500	
RC20GF470J	RES, FXD, COMP	A3362-2		1	1	R524	
RC20GF472J	RES, FXD, COMP	A3362-2		1		R503	
		A3362-2		1	2	R506	
RC20GF560J	RES, FXD, COMP	A3362-2		1	1	R523	
RC20GF561J	RES, FXD, COMP	A3362-2		1		R511	
		A3362-2		1		R512	
		A3362-2		1	3	R522	
RC20GF680J	RES, FXD, COMP	A3362-2		1	1	R517	
RG188/U	CBL, RF	CA418-9		8	8		
RV106UX8B501A	RES, VAR, COMP	A3362-2		1	1	R516	
RV111U501A	RES, VAR, COMP	A3362-2		1	1	R513	
SC131-0440BN3	SCR, MACH-UNDC	A2841		6			
		A2842		4	10		
SC131-0440BN5	SCR, MACH-UNDC	A2841		2	2		
SC143-0440B10	SCR, MACH-NYLON	A3362-2		5	5		

**MATERIAL LIST /  
NUMERICAL PARTS LIST**

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MODEL: TTRT-1

SHEET 7 OF 10

PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
SC143-0832B6	SCR, MACH-NYLON	A2843		1	1		
SCBP0440BN3	SCR, MACH	A2841		2	2		
SCBP0440BN4	SCR, MACH	A2841		4			
		A3362-2		17	21		
SCBP0440BN5	SCR, MACH	A3362-2		2	2		
SCBP0440BN12	SCR, MACH	A2842		2	2		NOTE 3
SCFP0440BN6	SCR, MACH	A2841		2	2		
SW192-12NSJ	SW, ROTARY-TAP	A3362-2		1	1	S501	
TA111-2-2-1.00G	TAPE, URETHANE	MS4401		1	1		
TE117-48	SPACER, SLV	A2841		2	2		
TE164-7	NUT, PLN, CLINCH	PC102-3		4	4		
WA131-22	WASH., SPG TENS	MS3370		2	2		
WI123-28	WIRE, ELEC, MAG, HT	A3223-15		30	30		SZ 28
WI123-34	WIRE, ELEC, MAG, HT	A3223-16		96			SZ 34
		A3223-17		96			SZ 34
		A3223-18		102			SZ 34
		A3223-19		96	390		SZ 34
WI149-1	CBL, SP, SHLD/JKT	CA808-2		11	11		2/C
WL100-8	WIRE, ELEC, BUSS	A3362-2		14	14		SZ 24



**MATERIAL LIST /  
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PART NO.	DESCRIPTION ELECTRICAL/MECHANICAL	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
TX109	TRANSISTOR	A3362-2		1	6	Q501 Q502 Q503 Q504 Q505 Q506	OSC. BUFFER BAL. MIX. BAL. MIX. AMPLIFIER DRIVER
TX100	TRANSISTOR	A3362-2			1	Q507	PA

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PART NO.	DESCRIPTION SUPP ASSY/REF DWGS	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
A2841	TTRT-1 FNL ASSY	TTRT-1		1	1		
A2842	PC BD/CHAS ASSY	A2841		1	1		
A2843	PNL ASSY,FRONT	A2841		1	1		
A3362-2	PC BD ASSY	A2842		1	1		
CA418-9	CBL ASSY,RF	A3362-2		1	1	W502	
CA808-2	CBL ASSY,SP,SHLD	A3362-2		1	1	W501	
CH312	CHART,UNIT BKDN	TTRT-1		1	1		
CK661	DIAG,BLOCK	TTRT-1		1	1		
CK689	DIAG,SCHEM	TTRT-1		1	1		
PC102-3	PC BD,MECH ASSY	A3362-1		1	1		
TZ141	XFMR,RF	A3362-2		1	1	T501	#A3223-15
TZ142	XFMR,RF	A3362-2		1	1	T502	#A3223-16
TZ143	XFMR,RF	A3362-2		1	1	T503	#A3223-17
TZ144	XFMR,RF	A3362-2		1	1	T504	#A3223-18
TZ145	XFMR,RF	A3362-2		1	1	T505	#A3223-19



