

ACTIVE TUNING ANTENNA SYSTEM

ATAS-120

Technical Supplement

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Specifications

Frequency Range: 7/14/21/28/50/144/430 MHz Amateur Bands

Height (Approx.): 1.4 ~ 1.6 meters (4.59 ~ 5.24 feet)

Weight (Approx.): 900 g (1.98 lbs.)

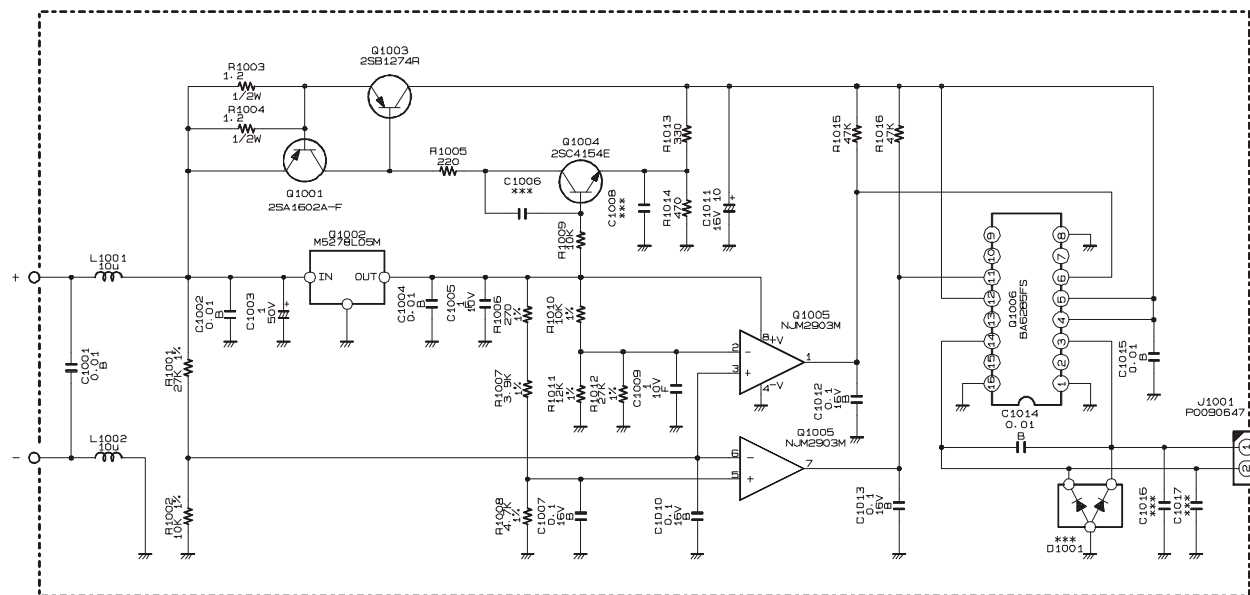
Input Impedance: 50-ohm

Max. Input Power: 120 Watts (SSB)

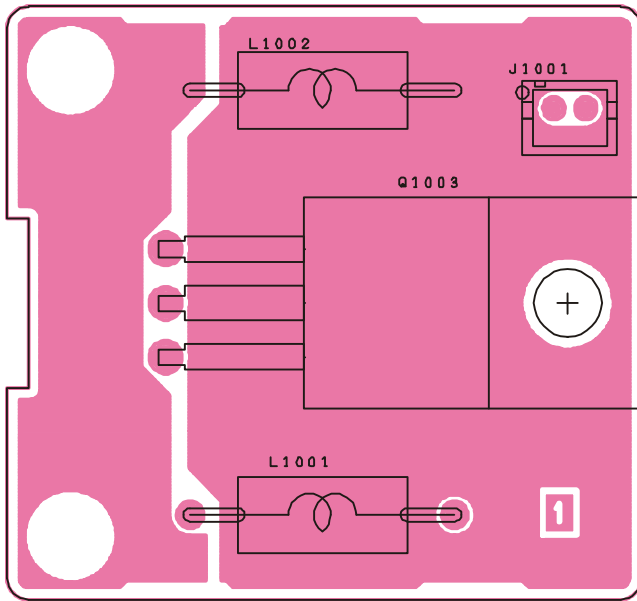
Matched SWR: Less than 2.0:1 (with proper counterpoise)

(Specifications subject to change without notice or obligation)

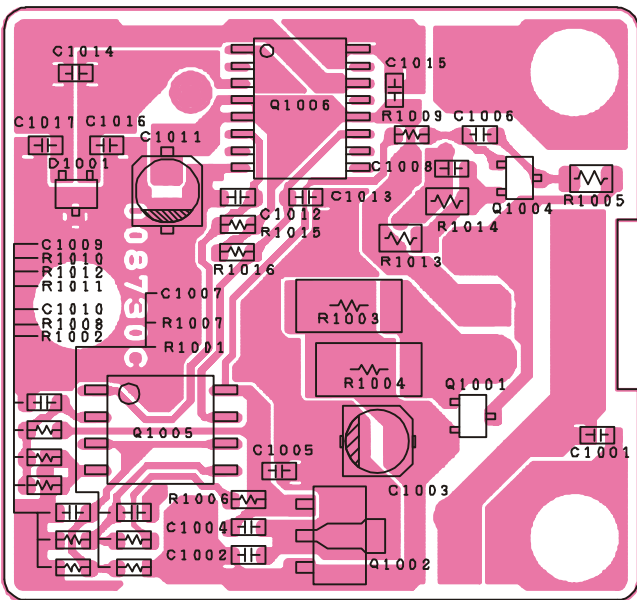
Circuit Diagram



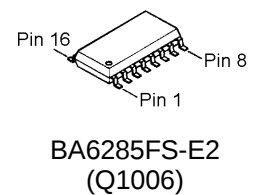
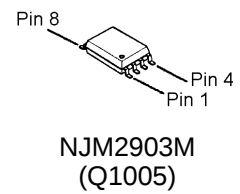
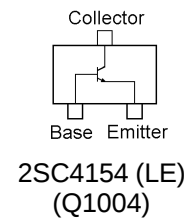
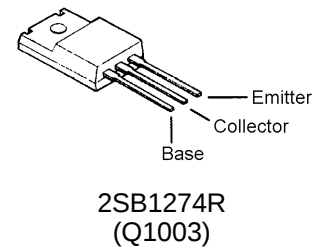
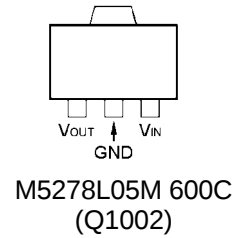
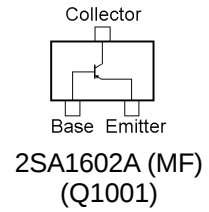
Parts Layout



Side A



Side B



Parts List

REF	DESCRIPTION	VALUE	V/W	TOL	MFR'S DESIG	VXSTD P/N	LOT.	SIDE
PCB with Compornents						S8101372		
Printed Circuit Board						FR008730C		1-
C 1001	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B
C 1002	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B
C 1003	AL.ELECTRO.CAP.	1uF	50V		ECEV1HS010SR	K48170001	1-	B
C 1004	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B
C 1005	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001	1-	B
C 1007	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B
C 1009	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001	1-	B
C 1010	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B
C 1011	AL.ELECTRO.CAP.	10uF	16V		RV2-16V100MB55-R	K48120014	1-	B
C 1012	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B
C 1013	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805	1-	B
C 1014	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B
C 1015	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823	1-	B
J 1001	CONNECTOR				B2B-ZR	P0090647	1-	A
L 1001	M.RFC	10uH			LAL04NA100K	L1190138	1-	A
L 1002	M.RFC	10uH			LAL04NA100K	L1190138	1-	A
Q 1001	TRANSISTOR				2SA1602A-T11-1F	G3116028F	1-	B
Q 1002	IC				M5278L05M 600C	G1093101	1-	B
Q 1003	TRANSISTOR				2SB1274R	G3212740R	1-	A
Q 1004	TRANSISTOR				2SC4154-T11-1E	G3341548E	1-	B
Q 1005	IC				NJM2903M(TE1)	G1093090	1-	B
Q 1006	IC				BA6285FS-E2	G1093249	1-	B
R 1001	CHIP RES.	27k	1/16W	1%	RMC1/16 273FTP	J24183273	1-	B
R 1002	CHIP RES.	10k	1/16W	1%	RMC1/16 103FTP	J24183103	1-	B
R 1003	CHIP RES.	1.2	1/2W	5%	RMC1/2 1R2JTE	J24275129	1-	B
R 1004	CHIP RES.	1.2	1/2W	5%	RMC1/2 1R2JTE	J24275129	1-	B
R 1005	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221	1-	B
R 1006	CHIP RES.	270	1/16W	1%	RMC1/16 271FTP	J24183271	1-	B
R 1007	CHIP RES.	3.9k	1/16W	1%	RMC1/16 392FTP	J24183392	1-	B
R 1008	CHIP RES.	4.7k	1/16W	1%	RMC1/16 472FTP	J24183472	1-	B
R 1009	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103	1-	B
R 1010	CHIP RES.	10k	1/16W	1%	RMC1/16 103FTP	J24183103	1-	B
R 1011	CHIP RES.	12k	1/16W	1%	RMC1/16 123FTP	J24183123	1-	B
R 1012	CHIP RES.	27k	1/16W	1%	RMC1/16 273FTP	J24183273	1-	B
R 1013	CHIP RES.	330	1/10W	5%	RMC1/10T 331J	J24205331	1-	B
R 1014	CHIP RES.	470	1/10W	5%	RMC1/10T 471J	J24205471	1-	B
R 1015	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473	1-	B
R 1016	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473	1-	B

Mechanical Details (Exploded Views & Mechanical Parts)

Screw List			
No.	VXSTD P/N	Description	Qty.
①	U00105002	PAN HEAD SCREW M2X5NI	4
②	U02204001	PAN HEAD SCREW SM2.6X4	3
③	U20306002	BINDING HEAD SCREW M3X6NI	1
④	S8001866	BINDING HEAD SCREW M3X6NI	2
⑤	S8001867	BINDING HEAD SCREW M4X8NI	6
⑥	S8002041	OVAL HEAD SCREW M3X3	3
⑦	S8001863	OVAL HEAD SCREW M2X6	1
⑧	U60300302	HEX NUT N3NI	1
⑨	U76008002	WASHER AW8	1
⑩	U81055020	E RING ETW-6	1
⑪	U91304001	HEX SOCKET SET SCREW M3X4	1
⑫	U91306001	HEX SOCKET SET SCREW M3X6	1
⑬	S8002036	HEX SOCKET SET SCREW M4X7	2
⑭	S8001862	NYLON WASHER T=1.0	6

Description	VXSTD P/N
LENCH F/SCREW	S8002042
LABEL (ATAS-120)	RA0437800

