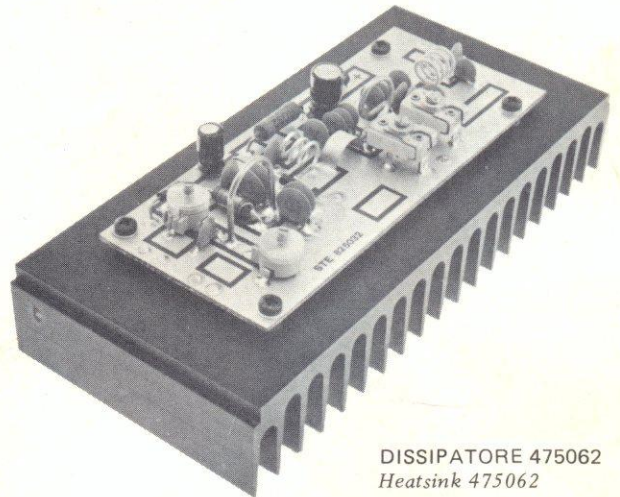
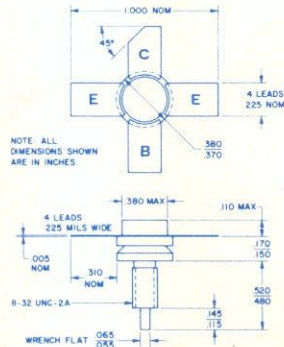




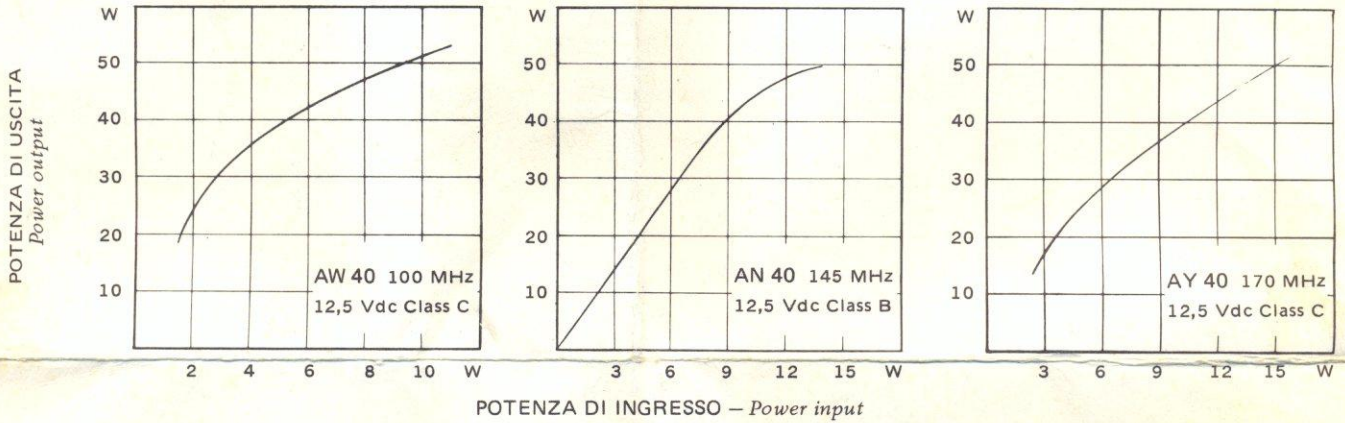
# RF POWER AMPLIFIER

## mod. AW40 - AN40 - AY40

TRANSISTOR STRIPLINE  
CTC B40-12

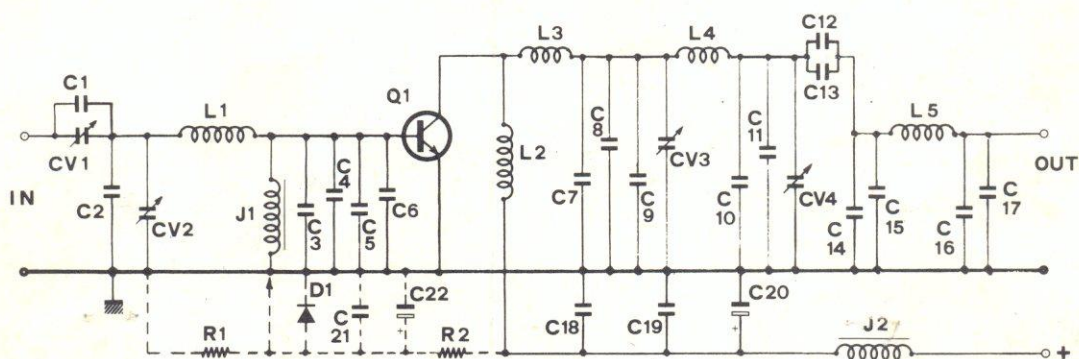


DISSIPATORE 475062  
Heatsink 475062

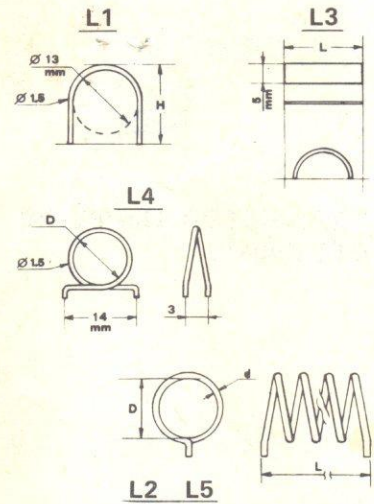
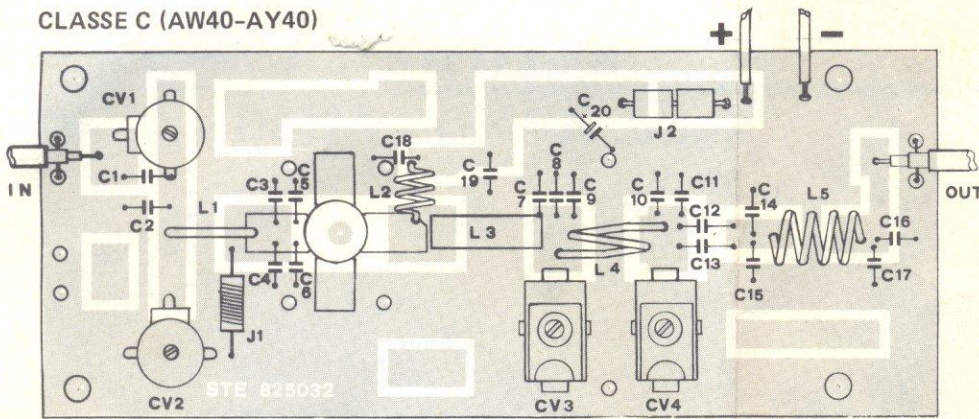


CARATTERISTICHE - Characteristics	AW40	AN40	AY40
FREQUENZA Frequency	88 - 108 MHz	144 - 148 MHz	150 - 175 MHz
POTENZA DI USCITA NOM. (12,5VDC) Nom. Output Power (1)	40W	40W	40W
POTENZA DI USCITA MAX. (2) Max. Output Power	50W	50W	50W
GUADAGNO (40W - 12,5 VDC) Power Gain	9,5 dB	6,8 dB	5,6 dB
ALIMENTAZIONE Power Source	11 - 15 VDC 4,5A	11 - 15 VDC 4,5A	11 - 15 VDC 4,5A
DIMENSIONI (3) Dimensions	154 x 70 x 46 mm	154 x 70 x 46 mm	154 x 70 x 46 mm

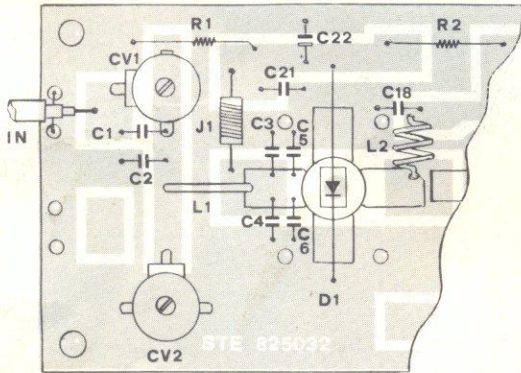
NOTE: (1) SERVIZIO CONTINUATIVO - Continuous duty - (2) SERVIZIO INTERMITTENTE - Intermittent service  
(3) CON DISSIPATORE 475062 - With heatsink 475062



**CLASSE C (AW40-AY40)**



**CLASSE B (AN40)**



**NOTE DI MONTAGGIO :**

**A - SEQUENZA DI MONTAGGIO :**

*Mounting steps*

- 10) CIRCUITO STAMPATO SUL DISSIPATORE - P.C. board on heatsink
- 20) TRANSISTORE - Transistor
- 30) COMPONENTI - Components

**B - USARE GRASSO AL SILICONE FRA DISSIPATORE E TRANSISTORE E NON STRINGERE ESAGERATAMENTE IL DADO. - Use silicone grease between heatsink and transistor and don't stress the stud excessively.**

**C - I CONDENSATORI CERAMICI VANNO SALDATI CON FILI CORTISSIMI (2 - 3 mm) E RIPIEGATI IN PIANO - All ceramic capacitors must be soldered on the board with very short leads (2 - 3 mm).**

**ATTENZIONE :** NON INVERTIRE LA POLARITA' DELLA TENSIONE DI ALIMENTAZIONE  
*Don't invert power source polarity.*

	AW40 (88 - 108 MHz)	AN40 (144 - 148 MHz)	AY40 (150 - 175 MHz)
C1	10 pF NPO	-	-
C2	47 pF N750	10 pF NPO	10 pF NPO
C3 - C4	100 pF N750	68 pF N750	68 pF N750
C5 - C6	100 pF N750	100 pF N750	100 pF N750
C7	33 pF N750	18 pF N750	33 pF N750
C8 - C9	47 pF N750	33 pF N750	33 pF N750
C10 - C11	10 pF NPO	4.7 pF NPO	4.7 pF NPO
C12 - C13	470 pF	470 pF	470 pF
C14 - C15	10 pF NPO	8.2 pF NPO	6.8 pF NPO
C16 - C17	10 pF NPO	8.2 pF NPO	6.8 pF NPO
C18	470 pF	470 pF	470 pF
C19	1000 pF	1000 pF	1000 pF
C20	47 µF 16 V	47 µF 16 V	47 µF 16 V
C21	-	1000 pF	-
C22	-	22 µF 16 V	-
CV1 - CV2	6 - 38 pF (280018)	6 - 38 pF (280018)	6 - 38 pF (280018)
CV3	8 - 60 pF MICA (280025)	8 - 60 pF MICA (280025)	8 - 60 pF MICA (280025)
CV4	8 - 60 pF MICA (280025)	3 - 35 pF MICA (280024)	3 - 35 pF MICA (280024)
D1	-	1N4002*	-
J1	15 sp. φ 0.30 su 47 Ω 1/2W	15 sp. φ 0.30 su 47 Ω 1/2W	15 sp. φ 0.30 su 47 Ω 1/2W
J2	2 nuclei a perline (ferrite beads) (110015)	2 nuclei a perline (ferrite beads) (110015)	2 nuclei a perline (ferrite beads) (110015)
L1	H = 18 mm	H = 18 mm	H = 15 mm
L2	3 sp. (turns) D = 5 L = 8 d = 1	3 sp. (turns) D = 5 L = 8 d = 1	3 sp. (turns) D = 5 L = 8 d = 1
L3	L = 25 mm	L = 18 mm	L = 16 mm
L4	D = 10 mm	D = 9 mm	D = 8 mm
L5	4 sp. (turns) D = 7 L = 8 d = 1	4 sp. (turns) D = 6 L = 8 d = 1	4 sp. (turns) D = 5 L = 8 d = 1
R1	-	12 Ω 1/4W*	-
R2	-	220 Ω 2W	-

\* FUNZIONAMENTO IN CLASSE B: SELEZIONARE IL VALORE DI R1 PER UNA CORRENTE A RIPOSO ATTRAVERSO L2 DI 25 mA CIRCA. IL DIODO DEVE ESSERE TERMICAMENTE ACCOPPIATO AL TRANSISTORE; USARE GRASSO AL SILICONE.  
*Class B operation: select R1 for a current (without drive) through L2 of about 25 mA. Diode D1 must be thermally connected to transistor; use silicone grease.*