

AMPLIFIER

155-0175-00 H476

DESCRIPTION

The H476 is a versatile high speed hybrid amplifier using a M178 integrated circuit. The circuit can provide a gain of 4.6 (13.3 dB) from a 50 Ω push-pull source without an output termination into a load of 50 Ω per side. Alternatively the circuit may be configured to provide a gain of 2.3 (7.3 dB) with an output termination of 50 Ω per side and into a load of 50 Ω per side. Risetime is less than 140 ps in either configuration.

By adjusting the ratio between two DC currents, the gain may be made to vary linearly from \emptyset to 2.3 or 4.6. There is no invert mode built in. An emitter pick-off provides a third output signal with a fixed gain of 0.5. The input common mode voltage appears on Pin #12.

Refer to 203-0178-90 M178

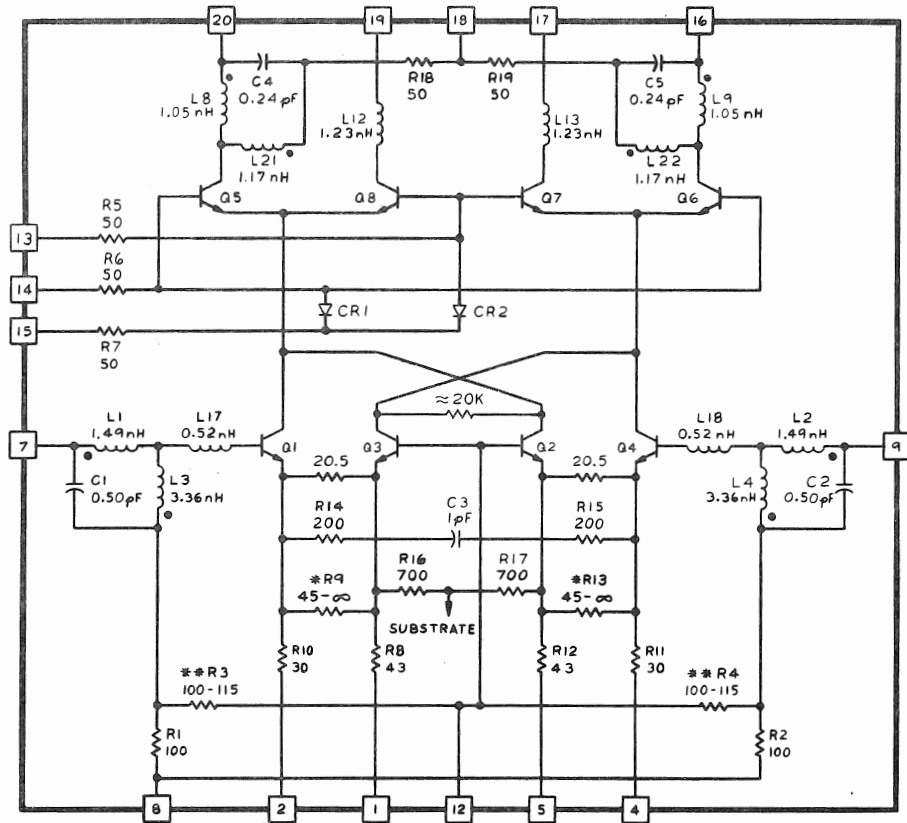
PROCESS Thin-Film

POWER SUPPLY.

PACKAGE 1.75 cm Hypcon System

DESIGNER John Addis

INSTRUMENT USAGE 7104
7A29



NOTES:

- L1 IS COUPLED TO L4 $M=0.308nH$
- L2 IS COUPLED TO L3 $M=0.308nH$
- L8 IS COUPLED TO L21 $M=0.165nH$
- L9 IS COUPLED TO L22 $M=0.165nH$
- * TRIMMED FOR GAIN
- ** TRIMMED FOR $R_{in}=50\Omega$
- Q1, Q2, Q3, AND Q4 ARE $2 \times (1.7\mu \times 50\mu)$ DEVICES
- Q5, Q6, Q7, AND Q8 ARE $2 \times (2.5\mu \times 50\mu)$ DEVICES
- CR1 AND CR2 ARE $2 \times (2.5\mu \times 12.5\mu)$ DEVICES

H476 AMPLIFIER		INTEGRATED CIRCUIT ENG WFG EXTRONIX, INC BEAVERTON, OREGON, U.S.A.	
PART NO.	155-0175-00	TYPE	HYBRID
ENG	John L. Adde 8-11-78	PROCESS	SHF III
DWN BY	Wynn Smith 8-18-78	PACKAGE	1.75 cm HYPCON
CHK BY	BOB GAULT 9-11-78	DIE SIZE	42 x 54 mils

