

U.H.F. CONVERTER CO2/528

Introduction

The CO2/528 is a u.h.f. converter designed for use in television monitoring receivers¹. It accepts the u.h.f. signal and an input from a local oscillator² and provides an output containing both vision and sound i.f. signals. It consists of a 3-dB input pad, a broad-band crystal mixer and a pre-i.f. amplifier, each separately screened.

The unit is built on a printed board and mounted in a modified screened chassis type CH1/39A with index pegs 17 and 23.

Signal connections to the converter are made by means of BNC sockets on the front panel.

General Specification

<i>Input Frequency</i>	Any channel in Bands IV or V
<i>Output Frequency</i>	
Vision carrier	37.5MHz
Sound carrier	31.5MHz
<i>Local Oscillator Frequency</i>	37.5 MHz above vision carrier

<i>Local Oscillator Input Signal Level</i>	1V r.m.s. across 50 ohms
<i>Aerial Input Impedance</i>	50 ohms (nominal)
<i>Input VSWR (any channel)</i>	Not greater than 1.3
<i>Maximum Input</i>	50mV r.m.s.
<i>Maximum Output across 75 ohms</i>	60mV r.m.s.
<i>Power Gain between Matched Impedances</i>	0dB approximately
<i>Amplitude/frequency Characteristic over any 8 MHz Channel</i>	Flat within 0.5 dB
<i>Noise Figure</i>	Not greater than 18dB
<i>D.C. Power Requirements</i>	12 mA at 12 V, negative E
<i>Weight</i>	2 ³ / ₄ lb.

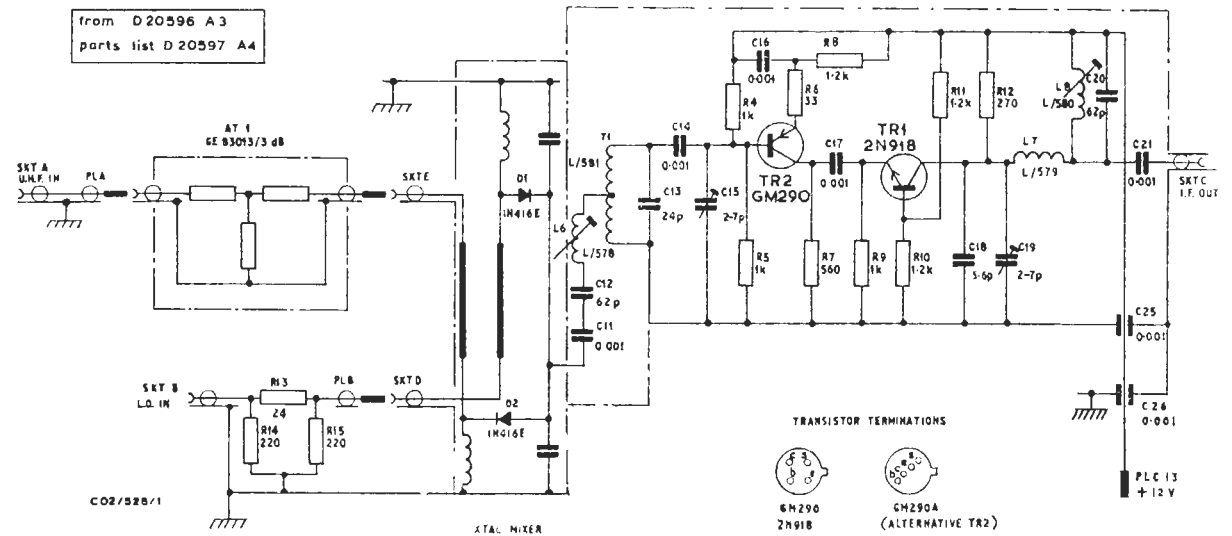


Fig. 1 Circuit of the CO2/528