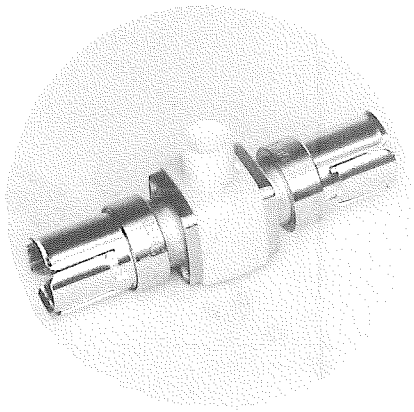


VP-2 VOLTAGE PICKOFF (Part No. 017-0077-01)



The Tektronix VP-2 is a special 50 ohm 'T' type pickoff for use with the high input resistance Tektronix P6038 Direct Sampling Probe or the Type S-3 Sampling Head Probe. The in-line portion of the 'T' is fitted with GR Type 874 connectors and the pickoff point is a receptacle for the probe tip.


When used with a sampling probe, the VP-2 allows signal pickoff from a 50 ohm system with minimum disturbance of the system characteristics. This provides a convenient means of obtaining a signal for the vertical sampling unit from a closed 50 ohm system. The insertion voltage loss due to the VP-2 and probe is about 0.05%. Distortion of the vertical signal or the signal in the 50 ohm system will be negligible if the probe is properly compensated and the system is properly terminated. Since the VP-2 offers a low input impedance to the probe, it is recommended for use during the sampling system calibration.

Reflection coefficient of the VP-2 alone is about 4% inductive. With the probe inserted into the VP-2 the reflection coefficient is about 6% capacitive (measured with test system having T_r (risetime) or 150 ps). VSWR of the VP-2 only at 1 GHz is typically 1.1; with the probe inserted, typically 1.14.

The source impedance at the probe receptacle is about 62.5 ohms. This is comprised of the 37.5 resistance of the VP-2 (see schematic) in series with the 25 ohm terminated impedance of the VP-2 input and output.

The VP-2 compensates for the small shunt capacitance (2 pF) added by the probe tip so that minimum discontinuity is introduced into the 50 ohm system. If the probe is removed from the VP-2, the VP-2 will appear as a small inductor connected in series with the 50 ohm system. For this reason remove the VP-2 from the system when a probe is not in it.

All of the plug-on accessories supplied with either probe can be used with the VP-2 Voltage Pickoff. See the P6038 or Type S-3 Instruction Manual for input characteristics of these accessories.

DATA SHEET	
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Mechanical Parts List

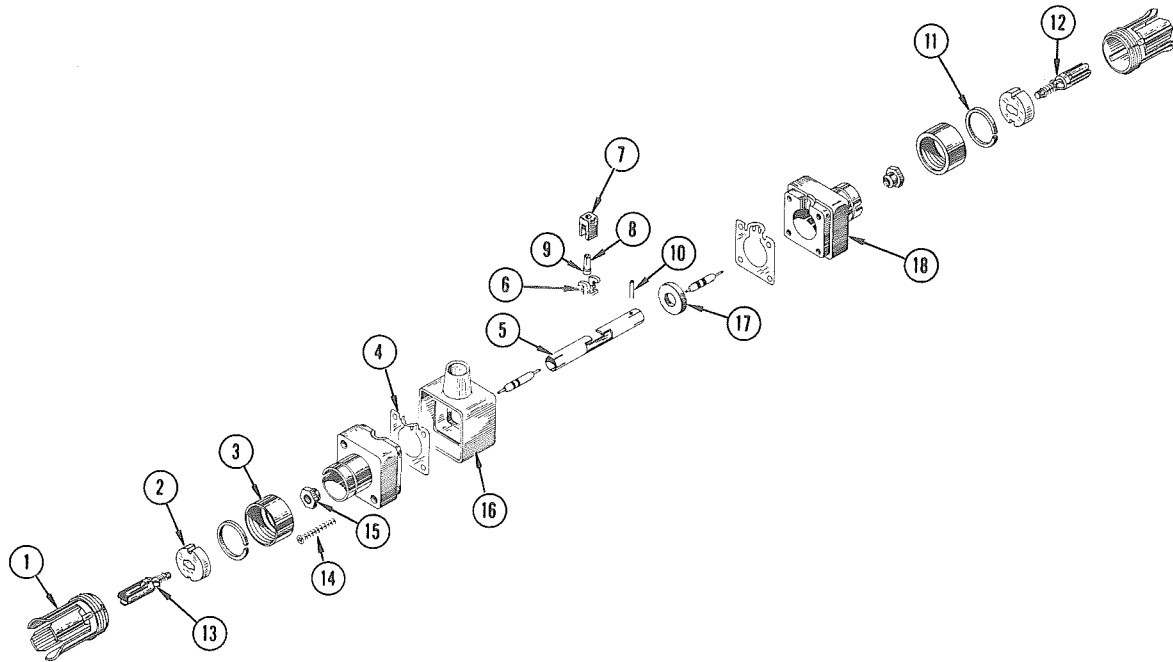
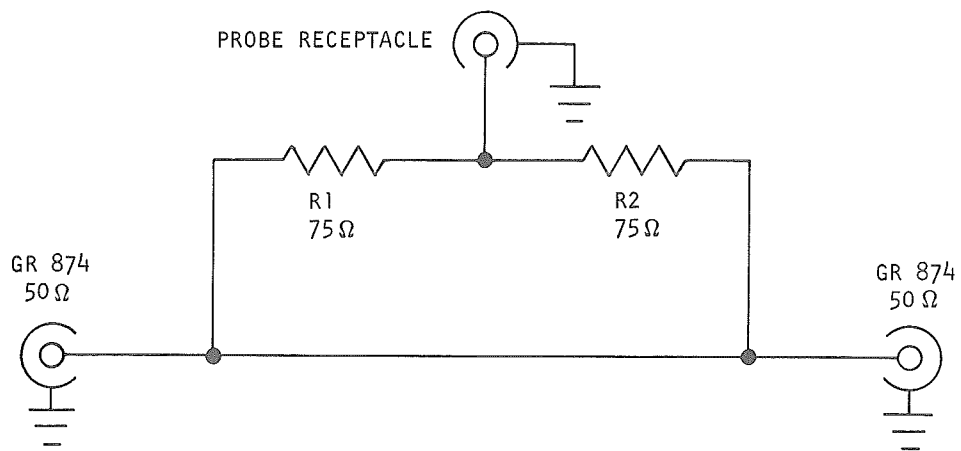


Fig. & Index No.	Tektronix Part No.	Serial/Model No.		Q † y	1	2	3	4	5	Description
		Eff	Disc							
1	132-0002-00			2						SLEEVE CONDUCTOR, outer
2	132-0028-00			2						INSULATOR, plastic
3	132-0001-00			2						NUT, coupling
4	344-0096-00		6851	2						CLIP, grounding
	131-0600-00	6852		2						CONTACT, electrical, spring
5	166-0365-00			1						TUBE, connector, 1.694 inches long
6	432-0051-00			1						BASE, insulator
7	351-0076-00			1						GUIDE, connector, plastic
8	166-0364-00			1						TUBE, contact, 0.208 inch long
9	214-0430-00			1						CONTACT, base
10	214-0110-00			1						PIN, roll
11	132-0007-00			2						SNAP RING
12	132-0123-00			1						INNER CONDUCTOR, w/hole for pin
13	132-0029-00			1						INNER CONDUCTOR
14	211-0076-00			4						SCREW, 2-56 x 5/8 inch, OHS
15	220-0418-00			2						NUT, connector, hex., 8-32
16	354-0229-01			1						RING, molded, plastic
17	210-0977-00			1						WASHER, guide, 0.562 inch diameter
18	204-0170-03		7039	2						BODY
	204-0170-04	7040		2						BODY

Electrical Parts List



Ckt. No.	Tektronix Part No.	Serial/Model No. Eff	No. Disc	Description		
RESISTORS						
R1	321-0085-00		75 Ω	1/8 W	Prec	1%
R2	321-0085-00		75 Ω	1/8 W	Prec	1%