

Figure Captions

- Fig.1. Pressure and temperature variation of relative resistivity for Russian (1) and German (2) manganin
- Fig.2. Pressure variation of the relative changes of the pressure sensitivity coefficient for Russian manganin sensors (1,2,3)
- Fig.3. Pressure variation of resistivity for two tellurium monocrystals
 $1,2 - a^R = 1.75 \times 10^{-5} \text{ eV/atm}$ ($R_0 = 19,6 \text{ ohm}$)
 $3,4 - a^R = 1.48 \times 10^{-5} \text{ eV/atm}$ ($R_0 = 6,5 \text{ ohm}$)
- Fig.4. $I_C = f(V_C)$ as a function of pressure and temperature for a planar transistor (OE connection)
1 - P_{atm} , 20°C ; 2 - P_{atm} , 22°C ; 3 - 4000 atm, 20°C ;
4 - P_{atm} , 24°C ; 5 - 4000 atm, 22°C ; 6 - P_{atm} , 26°C ;
7 - 4000 atm, 24°C ; 8 - 4000 atm, 26°C .
- Fig.5. The relative changes of V_{BE} as a function of pressure for a planar transistor (OE connection)
1,2,3 - transistor 12; $I_B: 30, 20, 10 \mu\text{A}$
4,5,6 - transistor 13; $I_B: 30, 20, 10 \mu\text{A}$
7,8,9 - transistor 12; $I_C: 2 \text{ mA}, 500 \mu\text{A}, 100 \mu\text{A}$.
- Fig.6. $I_C = f(U_{BE})$ for a planar transistor (OE connection)
1 - atmospheric pressure; 2 - 6000 atm
- Fig.7. The relative changes of U_{BE} as a function of temperature for a planar transistor (OE connection)
1,2,3, - $I_C = 2 \text{ mA}$; P : atmospheric, 2500 atm, 5000 atm
4,5,6 - $I_C = 500 \mu\text{A}$; P : atmospheric, 2500 atm, 5000 atm
- Fig.8. Coefficient of pressure quality for electric sensors
1,2,3 - manganin sensors (item 1,2 and 3 in Table 2)
4,5,6,7 - Te, InSb sensors (item 4,5,6 and 7 in Table 2)
10, 11 - planar transistor sensor (item 10 and 11 in Table 2).

Table 1.
Values of Coefficients a,b,c in Eq.2
(in the temperature range 0 - 50°C)

Electric Sensor	a $\times 10^{-7}$ [deg $^{-2}$]	b $\times 10^{-5}$ [deg $^{-1}$]	c $\times 10^{-4}$	$(\frac{\Delta R}{R_0})_{\max}$ $\times 10^{-5}$	t _{max} [deg]
1 German manganin at atmospheric pressure†	-4.1	1.26	-0.88	0.88	15.4
2 German manganin at 6000 atm	-3.57	1.82	-2.2	1.07	25.5
3 Russian manganin before heat treatment	-6.2	3.5	-4.5	4.25	28.2
4 Russian manganin after heat treatment	-4.65	2.38	-2.91	1.42	25.6
5 Russian manganin as in (4) at 3000 atm and 6000 atm	-4.1	3.11	-4.58	12.8	37.8
6 German-Russian manganin sensor‡	-4.35	1.82	-1.89	0.06	21.0
7 Te* (selected crystal)	-540	350	-490	770	32.4
8 InSb* (selected crystal)	0	-0.085	1700	-	-
9 Te + InSb**	-500	260	-330	126	26.0

†Before and after heat treatment.

‡Sensor constructed by Czaputowicz by connecting German and Russian manganin (as in items (2) and (4)).

*In the temperature range 15 - 30°C.

**Monocrystals Te ($R_{Te} \approx 12.5$ ohm) and InSb ($R_{InSb} \approx 1$ ohm) connected in series.