No. 1C-c27 $PbTiO_3$–$PbZrO_3$–$Pb(Fe_{1/2}Nb_{1/2})O_3$

1b	Phase diagram: Fig. 1C-c27-001. Ferroelectric transition temperature: see	81Wha
3a	Lattice parameter: see	65Tan
5a	Dielectric constant: Table 1C-c27-001; Fig. 1C–a27–002.	
d	Pyroelectric constant: Table 1C-c27-001.	
7a	Electromechanical coupling coefficient: Fig. 1C-c27-002.	

Table 1C-c27-001. $PbTiO_3$–$PbZrO_3$–$Pb(Fe_{1/2}Nb_{1/2})O_3$ (ceramics). κ, $\tan\delta$, p_i vs. x, y and z [81Wha]. x, y and z: molar fractions in $(1-z)[(1-2x-y)PbZrO_3 \cdot y\ PbTiO_3 \cdot 2x\ Pb(Fe_{1/2}Nb_{1/2})O_3] \cdot z\ PbUO_3$.

Composition			Dielectric properties f = 1592 Hz		p_i (20 °C)
x	y	z	κ	tan δ	$[\cdot 10^{-4}\ Cm^{-2}K^{-1}]$
0.10	0.04	0	346	0.019	2.95
0.10	0.04	0.002	350	0.022	2.89
0.10	0.04	0.004	213	0.005	3.34
0.10	0.04	0.006	212	0.004	3.25
0.10	0.04	0.008	241	0.006	3.23
0.12	0.06	0	310	0.035	2.98
0.12	0.06	0.002	324	0.023	3.35
0.12	0.06	0.004	372	0.028	2.86
0.12	0.06	0.006	231	0.006	3.36
0.12	0.06	0.008	253	0.007	3.50

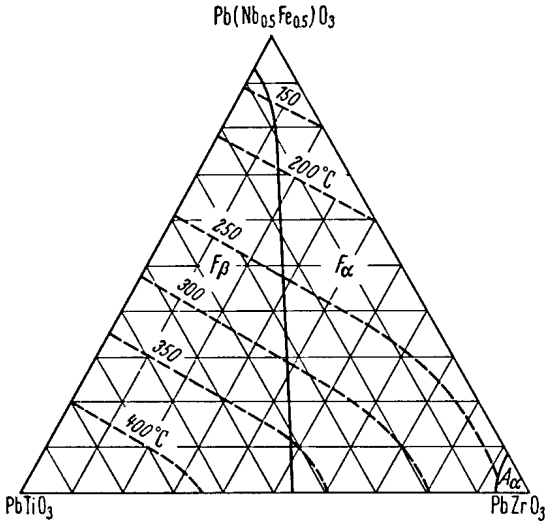

Fig. 1C-c27-001. $PbTiO_3$–$PbZrO_3$–$Pb(Fe_{1/2}Nb_{1/2})O_3$ (ceramics). Phase diagram [65Tan]. Figures indicate Θ_f.

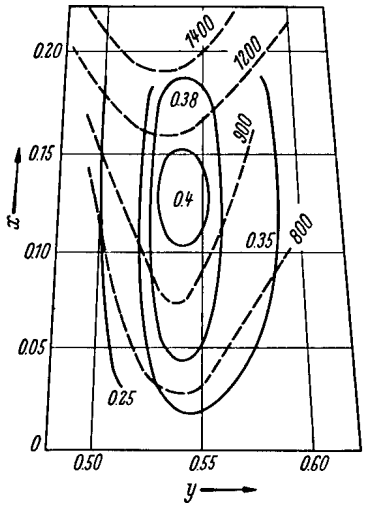

Fig. 1C-c27-002. $Pb[(Ti_{1-y}Zr_y)_{1-x}(Fe_{1/2}Nb_{1/2})_x]O_3$ (ceramics). k_p, κ vs. x, y [65Tan]. Full lines: k_p. Broken lines: κ. f = 100 kHz for κ.

References

65Tan Tanaka, Y., Ikeda, T., Toyoda, H.: Rev. Electr. Commun. Lab. **13** (1965) 744.
81Wha Whatmore, R.W., Bell, A.J.: Ferroelectrics **35** (1981) 155.