

Structural and Physical Properties:

	HRKTP	BBO	LiNbO ₃	KD*P	RTP
Crystal structure	Orthorhombic	Trigonal,	Trigonal	Tetragonal	Orthorhombic,
space group	Pna2 ₁	R _{3c}	R _{3c}		Pna2 ₁
point group	mm2		3m	42m	Mm2
Cell parameters	=6.404Å, b=10.616Å, c=12.814Å, Z=8	a = b = 12.532 Å, c = 12.717Å, Z = 6	a=5.148Å, c=13.863Å		a = 12.96 Å, b = 10.56 Å, c = 6.49Å°
Melting point	1172°C	1095± 5°C	1253° C		~ 1000 °C
Curie point	936°C	925± 5°C	1140° C		~810°C
Mohs hardness	≈5	4	≈5	2.5	~5
Density	3.01 g/cm ³	3.85 g/cm ³	4.64 g/cm ³	2.355 g/cm ³	3.6 g/cm ³
Thermal expansion coefficients:		a, 4 x 10 ⁻⁶ /K; c, 36 x 10 ⁻⁶ /K	//a, 2.0x10 ⁻⁶ /K //c, 16.7x10 ⁻⁶ /K	1.9x10 ⁻⁵ /K ⊥z 4.4x10 ⁻⁵ /K // z	a ₁ =1.01x10 ⁻⁵ , a ₂ =1.37x10 ⁻⁵ , a ₃ =-4.17x10 ⁻⁶
Hygroscopic susceptibility	NO	A Little	no	Yes	no
Thermal conductivity	0.13 W/cm/°K	⊥c, 1.2 W/m/K; //c, 1.6 W/m/K	38 W/m/K at 25 ⁰ C	1.9x10 ⁻² /W/cm/K ⊥ z 2.1x10 ⁻² /W/cm-K // z	
Therm-optic coefficients:(/k)	dn _x /dT=1.1x10 ⁻⁵ dn _y /dT=1.3x10 ⁻⁵ dn _z /dT=1.6x10 ⁻⁵	dn _o /dT = -9.3 x 10 ⁻⁶ dn _e /dT = -16.6 x 10 ⁻⁶	dn _o /dT=-0.874x10 ⁻⁶ dn _e /dT=39.073x10 ⁻⁶		