SERIES S32 – S33 · SINGLE CRYSTALS

Single-crystal oxide & semiconductor substrates



Lattice-matched substrates for epitaxial oxide, superconductor, ferroelectric, magnetic and III-V thin films. Epi-polished (Ra < 0.5 nm typical) and individually packed; thickness 0.5 mm unless stated.

- Miscut and TiO_2-terminated $SrTiO_3$ on request
- pc = pseudocubic lattice parameter
- SI = semi-insulating; n / p = doped
- Lithium niobate: see Piezoelectric Substrates

OXIDE SINGLE CRYSTALS

Ref. No.	Material	Lattice	Orientation	Size	Polish	Price
S3201	$SrTiO_3$	Cubic, a = 3.905 Å	(100)	5 × 5 mm	SSP	On request
S3202	$SrTiO_3$	Cubic, a = 3.905 Å	(100)	5 × 5 mm	DSP	On request
S3203	$SrTiO_3$	Cubic, a = 3.905 Å	(100)	10 × 10 mm	SSP	On request
S3204	$SrTiO_3$	Cubic, a = 3.905 Å	(100)	10 × 10 mm	DSP	On request
S3205	$SrTiO_3$	Cubic, a = 3.905 Å	(110)	5 × 5 mm	SSP	On request
S3206	$SrTiO_3$	Cubic, a = 3.905 Å	(110)	5 × 5 mm	DSP	On request
S3207	$SrTiO_3$	Cubic, a = 3.905 Å	(110)	10 × 10 mm	SSP	On request
S3208	$SrTiO_3$	Cubic, a = 3.905 Å	(110)	10 × 10 mm	DSP	On request
S3209	$SrTiO_3$	Cubic, a = 3.905 Å	(111)	5 × 5 mm	SSP	On request
S3210	$SrTiO_3$	Cubic, a = 3.905 Å	(111)	5 × 5 mm	DSP	On request
S3211	$SrTiO_3$	Cubic, a = 3.905 Å	(111)	10 × 10 mm	SSP	On request
S3212	$SrTiO_3$	Cubic, a = 3.905 Å	(111)	10 × 10 mm	DSP	On request
S3213	Nb:$SrTiO_3$	0.05 wt % Nb	(100)	5 × 5 mm	SSP	On request
S3214	Nb:$SrTiO_3$	0.05 wt % Nb	(100)	10 × 10 mm	SSP	On request
S3215	Nb:$SrTiO_3$	0.5 wt % Nb	(100)	5 × 5 mm	SSP	On request
S3216	Nb:$SrTiO_3$	0.5 wt % Nb	(100)	10 × 10 mm	SSP	On request
S3217	$LaAlO_3$	pc a ≈ 3.79 Å	(100)	10 × 10 mm	SSP	On request
S3218	$LaAlO_3$	pc a ≈ 3.79 Å	(100)	10 × 10 mm	DSP	On request
S3219	MgO	Cubic, a = 4.212 Å	(100)	10 × 10 mm	SSP	On request
S3220	MgO	Cubic, a = 4.212 Å	(100)	10 × 10 mm	DSP	On request
S3221	MgO	Cubic, a = 4.212 Å	(110)	10 × 10 mm	SSP	On request
S3222	MgO	Cubic, a = 4.212 Å	(110)	10 × 10 mm	DSP	On request
S3223	MgO	Cubic, a = 4.212 Å	(111)	10 × 10 mm	SSP	On request
S3224	MgO	Cubic, a = 4.212 Å	(111)	10 × 10 mm	DSP	On request
S3225	MgO	Cubic, a = 4.212 Å	(100)	2" wafer	SSP	On request
S3226	YSZ	Cubic, a ≈ 5.14 Å	(100)	10 × 10 mm	SSP	On request
S3227	YSZ	Cubic, a ≈ 5.14 Å	(100)	10 × 10 mm	DSP	On request

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S3228	YSZ	Cubic, a ≈ 5.14 Å	(111)	10 × 10 mm	SSP	On request
S3229	YSZ	Cubic, a ≈ 5.14 Å	(111)	10 × 10 mm	DSP	On request
S3230	$DyScO_3$	pc a ≈ 3.95 Å	(110)	5 × 5 mm	SSP	On request
S3231	$DyScO_3$	pc a ≈ 3.95 Å	(110)	10 × 10 mm	SSP	On request

SEMICONDUCTOR SINGLE CRYSTALS

Ref. No.	Material	Lattice	Orientation	Size	Type	Price
S3301	GaAs	a = 5.653 Å	(100)	2"	SI	On request
S3302	GaAs	a = 5.653 Å	(100)	2"	n-type	On request
S3303	GaAs	a = 5.653 Å	(100)	2"	p-type	On request
S3304	GaAs	a = 5.653 Å	(100)	3"	SI	On request
S3305	GaAs	a = 5.653 Å	(100)	3"	n-type	On request
S3306	GaAs	a = 5.653 Å	(100)	3"	p-type	On request
S3307	GaAs	a = 5.653 Å	(100)	4"	SI	On request
S3308	GaAs	a = 5.653 Å	(100)	4"	n-type	On request
S3309	GaAs	a = 5.653 Å	(100)	4"	p-type	On request
S3310	GaAs	a = 5.653 Å	(111)	2"	SI	On request
S3311	InP	a = 5.869 Å	(100)	2"	SI	On request
S3312	InP	a = 5.869 Å	(100)	2"	n-type	On request
S3313	InP	a = 5.869 Å	(100)	3"	SI	On request
S3314	InP	a = 5.869 Å	(100)	3"	n-type	On request
S3315	Germanium	a = 5.658 Å	(100)	2"	n or p (specify)	On request
S3316	Germanium	a = 5.658 Å	(111)	2"	n or p (specify)	On request
S3317	Germanium	a = 5.658 Å	(100)	4"	n or p (specify)	On request
S3318	4H-SiC	a = 3.073 Å, c = 10.053 Å	(0001) on-axis	10 × 10 mm	Semi-insulating or n	On request
S3319	4H-SiC	a = 3.073 Å, c = 10.053 Å	(0001) on-axis	2"	Semi-insulating or n	On request
S3320	4H-SiC	a = 3.073 Å, c = 10.053 Å	(0001) on-axis	4"	Semi-insulating or n	On request
S3321	4H-SiC	a = 3.073 Å, c = 10.053 Å	(0001) 4° off	10 × 10 mm	Semi-insulating or n	On request
S3322	4H-SiC	a = 3.073 Å, c = 10.053 Å	(0001) 4° off	2"	Semi-insulating or n	On request
S3323	4H-SiC	a = 3.073 Å, c = 10.053 Å	(0001) 4° off	4"	Semi-insulating or n	On request

Specifications are typical values; every lot ships with a Certificate of Conformance, and measured data are available on request. Prices on request.