

## SILICON MIRRORS - SUPERMAX

**Introduction**

The Supermax coating is intended for general-purpose use. Supermax is zero-phase type when used at 45° incidence.

**Typical measured specifications****Supermax**

$R(s) = 99.93\%$ ,  $R(p) = 99.81\%$ , Abs% at normal incidence = 0.11%

CW LIDT = 500W/mm +/-10%

NB: The LIDT values are the laser power that a new, clean mirror will withstand *per mm* ( $1/e^2$ ) of beam diameter.

**Available products, 'SuperMax' coated Si mirrors**

The 'SuperMax' coating is a new development. Utilizing a ThF4-free coating design, the Supermax coatings give the highest reflectivity available, and zero phase shift.

Please see next page (table 15.01) for standard sizes.

<b>Table 15.101</b>				
<b>Dia. (mm)</b>	<b>T (mm)</b>	<b>Radius</b>	<b>Coating</b>	<b>Part Number</b>
9.5	3.0	5.0m	SuperMax	3.7SIS3-05
19.0	3.0	Flat	SuperMax	7.5SIS3-00
19.0	3.0	10.0m	SuperMax	7.5SIS3-10
19.0	3.0	20.0m	SuperMax	7.5SIS3-20
25.0	3.0	Flat	SuperMax	9.8SIS3-00
25.0	3.0	3.0m	SuperMax	9.8SIS3-03
25.0	3.0	4.0m	SuperMax	9.8SIS3-04
25.0	3.0	5.0m	SuperMax	9.8SIS3-05
25.0	3.0	6.0m	SuperMax	9.8SIS3-06
25.0	3.0	10.0m	SuperMax	9.8SIS3-10
25.0	3.0	20.0m	SuperMax	9.8SIS3-20
25.0	4.0	Flat	SuperMax	9.8SIS4-00
25.0	4.0	10.0m	SuperMax	9.8SIS4-10
25.4	3.0	Flat	SuperMax	10SIS3-00
25.4	3.0	10.0m	SuperMax	10SIS3-10
25.4	4.0	Flat	SuperMax	10SIS4-00
25.4	5.0	Flat	SuperMax	10SIS5-00
25.4	5.0	3.0m	SuperMax	10SIS5-03F
25.4	5.0	3.0m	SuperMax	10SIS5-03
25.4	5.0	3.0m	SuperMax Masked	10SIS5-03M
28.0	3.1	20.0m	SuperMax	11SIS3-20
38.0	4.0	Flat	SuperMax	15SIS4-00
38.0	5.0	Flat	SuperMax	15SIS5-00
38.0	6.0	Flat	SuperMax	15SIS6-00
38.0	6.0	10.0m	SuperMax	15SIS6-10
38.0	6.0	15.0m	SuperMax	15SIS6-15
38.0	6.0	20.0m	SuperMax	15SIS6-20
38.0	9.7	Flat	SuperMax	15SIS10-00
38.1	6.3	Flat	SuperMax	15SIS6.3-00
38.1	6.3	7.5m	SuperMax Masked	15SIS6.3-07M
38.1	9.7	Flat	SuperMax	15SIS9.7-00
44.5	4.0	Flat	SuperMax	17.5SIS4-00
44.5	9.0	Flat	SuperMax	17.5SIS9-00
44.5	9.65	Flat	SuperMax Masked	17.5SIS10-00M
50.0	5.0	Flat	SuperMax	19.7SIS5-00
50.0	6.0	Flat	SuperMax	19.7SIS6-00
50.0	10.0	Flat	SuperMax	19.7SIS10-00
50.8	5.0	7.5m	SuperMax	20SIS5-07
50.8	5.0	25.0m	SuperMax	20SIS5-25
50.8	5.1	Flat	SuperMax	20SIS5-00
50.8	10.2	Flat	SuperMax	20SIS10-00
60.0	8.0	20.0m	SuperMax	CLS040
75.0	12.0	Flat	SuperMax	CLS010
75.0	12.0	Flat, // 3 secs	SuperMax	CLS020
75.0	12.0	20.0m	SuperMax	CLS080
75.0	15.0	Flat	SuperMax	CLS090
75.0	15.0	20.0m	SuperMax	CLS100