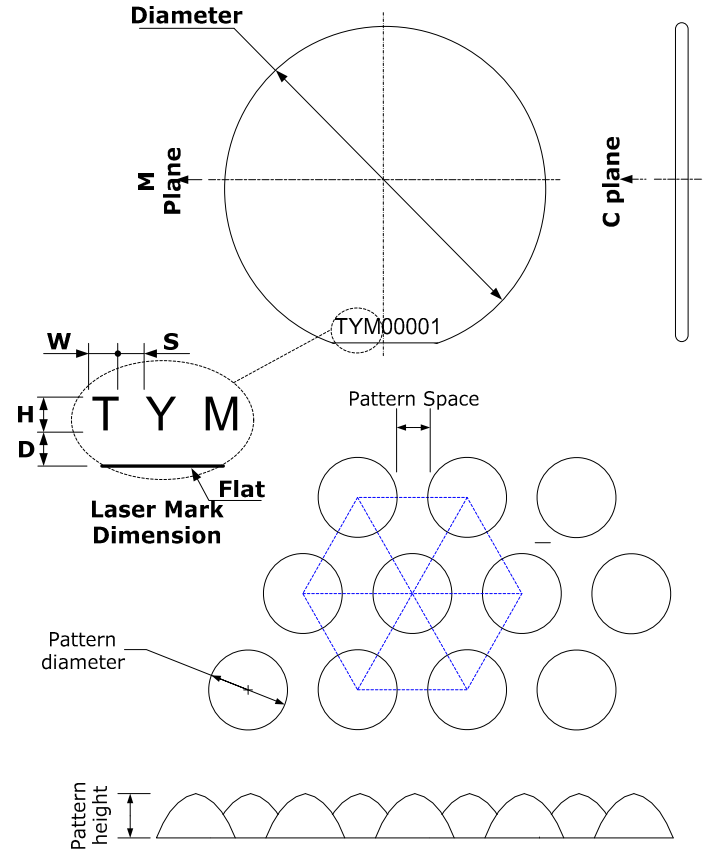


Specification of 4" Patterned Sapphire Substrate

Item	Specification
PSS Type	2.7*1.75*0.3um
Material	High purity and monocrystalline Al ₂ O ₃
Diameter	100 ± 0.1 mm
Thickness	650 ± 25 um
Orientation	C-plane (0001) off angle 0.2° ± 0.1° (M axis); 0.0° ± 0.1° (A axis)
Orientation flat	30 ± 1 mm
Primary flat location	A-axis [11-20] ± 0.3°
Front Side Surface	Mirror polished, EPI-Ready
Back Side Surface	Fine ground; Ra = 1.0 ± 0.2 um
TTV (5 points)**	< 10 um
Bow**	< 10 um
Pattern diameter	2.7 ± 0.15 um
Pattern Space	0.3 ± 0.15 um
Pattern Height	1.75 ± 0.1 um
Pattern Arrangement	Close-packed arrangement, hexagonal type
Defective patterns*	Total defective area ≤ 5% of wafer area; Inspection by naked eye added without bright light
Scratch	Visible to naked eye added without bright light; total length < 5 mm
Package	Clean room nitrogen atmosphere
Laser Mark	8 characters; PYMxxxx (P=initial code; T=Year; M=Month; XXXX=serial number) Back Surface, Center Aligned at OF H*W*S*D=1.3*0.8*0.2*1
Remark	字體靠右不超過右平邊，平邊朝上；cassette擺放位置：第1片位置亮面朝左擺放至第25片；盒號編碼原則：YYYYTA2PXXXXXX(YYY=民國年102~; T=TXT; A=0.2°; A=2°; P=PSS; XXXXXX=serial number) 限定廠內Corial自製Ring Type



* Defective patterns include contaminations, missing pattern and abnormal shape of pattern.

** Edge exclusion is 2 mm.