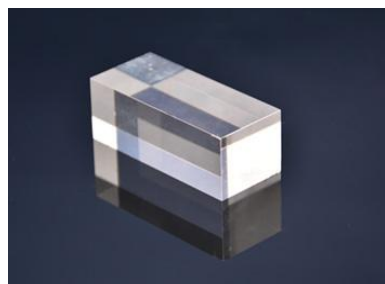


## YSO(Ce) Scintillators

Cerium doped Silicate Yttrium YSO(Ce) has an emission maximum at 420nm which belongs to monoclinic rare earth orthosilicate crystal. It has similar decay time with LYSO(Ce) (50-70ns), but it has no background (Lutecium), which needs to be removed in some precise detection field.



### Features:

- High light output
- High density and anti-radiation hardness
- Short decay time
- Stable chemical and physical properties
- No background radiation(Lutecium)

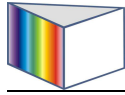
### Ability:

- Growth method: Czochralski
- Maximum dimension:  $\varnothing$  80mm  $\times$  160mm
- Available items: single crystals and arrays

### Basic Properties:

Basic Properties	
Density(g/cm <sup>3</sup> )	4.50
Melting Point (K)	2273
Refractive Index	1.8
Emission Peak( nm)	420
Decay Time (ns)	50-70
Light Output (photons/Mev)	10000
Effective Atomic Number (z)	39
Hygroscopic	None
Cleavage Plane	None

**Note:** The crystal boules, blanks and polished elements are available.



Application Notes:

- Radiation detection
- Security industry
- Semiconductor
- Photo optic application
- Positron emission tomography (PET)
- Nuclear medicine