

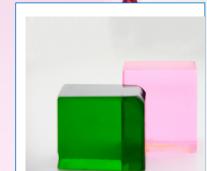
#### 成都迪恩光电科技有限公司 CHENGDU DIEN PHOTOELECTRIC TECHNOLOGY CO.,LTD

# Er:Glass

Erbium and ytterbium co-doped phosphate glass has a broad application because of the excellent properties. Mostly, it is the best glass material for  $1.54\mu m$  laser due to its eye safe wavelength of 1540 nm and high transmission through atmosphere. It's also suitable for medical applications where the need for eye protection may be difficult to manage or diminish or hinder essential visual observation. Recently it is used in optical fiber communication instead of EDFA for its more super plus. There is a great progress in this field.

**EAT14** is Erbium Glass doped with Er 3+ and Yb 3+ and suited to applications involving high repetition rates (1 - 6 Hz) and being pumped with 1535 nm laser diodes. This glass is available with high levels of Erbium (up to 1.7%).

**Cr14** is Erbium Glass doped with Er 3+, Yb 3+ and Cr 3+ and suited to applications involving xenon lamp pumping. This glass is often used in laser range finder (LRF) applications.



°C °C 10 <sup>-7</sup> /°C	556 605	455
		493
10 <sup>-7</sup> /°C		
	87	103
W/m. °K	0.7	0.7
ug/hr.cm2	52	103
g/cm2	3.06	3.1
nm	1535	1535
10 <sup>-20</sup> cm <sup>2</sup>	0.8	0.8
ms	7.7-8.0	7.7-8.0
Washington Co.	1.532	1.539
	1.524	1.53
	Marie Same Andrews	
10 <sup>-6</sup> /°C	-1.72	-5.2
	10 <sup>-20</sup> cm <sup>2</sup>	10 <sup>-20</sup> cm <sup>2</sup> 0.8  ms 7.7-8.0  1.532

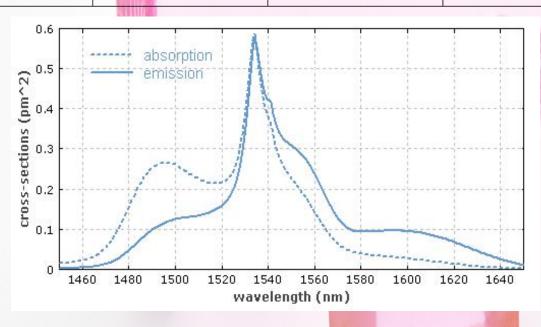
#### 成都迪恩光电科技有限公司 CHENGDU DIEN PHOTOELECTRIC TECHNOLOGY CO.,LTD

### **Standard Doping for EAT14**

Variants Er 3+	Yb 3+
	CHANGE
Er:Yb:Glass 1.3x10^20/cm3	10x10^20/cm3

## **Standard Doping for Cr14**

Variants	Er 3+	Yb 3+	Cr 3+
Er:Yb:Cr:Glass	0.16x10^20/cm3	12.3x10^20/cm3	0.129x10^20/cm3
Er:Yb:Cr:Glass	1.27x10^19/cm3	1.48x10^21/cm3	1.22x10^19/cm3
Er:Yb:Cr:Glass	4x10^18/cm3	1.2x10^19/cm3	4x10^18/cm3



Address:No.888,Middle Taodu Ave.Longquanyi District,Chengdu,P.R.C

E-mail: wenxugk@163.com; wenxugksales@163.com

www.dientech.com