

## C 波段低平坦 ASE 宽带光源

### C-band Low Flatness ASE Broadband Light Source

#### 1. 描述 (Description):

光纤 ASE 宽带光源属于非相干光源，是半导体激光浦掺铒石英光纤产生的自发辐射。光源波长覆盖 C 波段，光谱平坦度优于 7dB，单模光纤耦合输出。适合于光纤传感等应用。

This ASE broadband light source belongs to incoherent light source, which is the spontaneous emission generated by semiconductor laser erbium-doped quartz fiber, and the wavelength covers the C-band, and the spectral flatness  $\leq 7\text{dB}$ . SM fiber output power, suitable for fiber optic sensing application.

#### 2. 特性 (Features):

- 宽光谱 Wide spectrum;
- 高性价比 Cost effective;
- 高稳定度输出功率 High stability output power.

#### 3. 应用 (Applications):

- 光纤传感 Fiber sensing;
- 医学成像 Medical imaging;
- 生产测试 Fiber optic device testing.

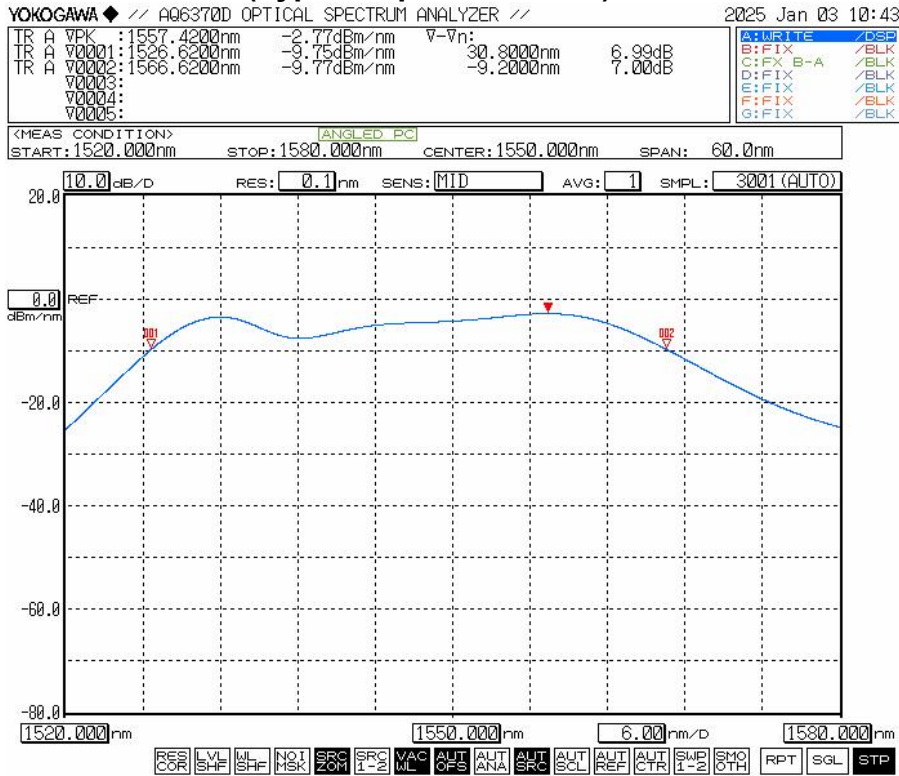


#### 4. 光电特性 (Electro-Optical Characteristics):

参数 Parameters	单位 Unit	参数 Values				备注 Notes
光谱范围 Spectral range	nm	1526~1566				$\pm 1\text{nm}$
输出光功率 Output power	mW	10	20	30	50	Non-Ajustable
功率谱密度 Power spectral density	dBm/nm	-6	-3	1	3	
光谱平坦度 Spectral flatness	dB	$\leq 7$				
光谱纹波 Spectral ripple	dB	$\leq 0.1$				
输出端隔离度 Output isolation	dB	$\geq 35$				
光功率稳定性 Power instability	dB	$\leq \pm 0.02(15\text{min.});$ $\leq \pm 0.05(8\text{hrs})$				$\leq \pm 0.5\%;$ $\leq \pm 1.2\%$
偏振态 Polarization state	-	Completely unpolarized				
偏振消光比 PER	dB	$\leq 0.2$				
尾纤和接头类型 Pigtail fiber	-	SMF-28				FC/APC
通信接口 Communication interface	-	DB9 Female(RS232)				Module
供电 Power supply	-	DC 5V, <15W				Module
尺寸 Dimensions	mm	10~30mW: 40(W)×60(D)×10(H)				Module
		10~50mW: 70(W)×90(D)×15(H)				

工作温度 Operating temperature	°C	-5 ~ +55	
工作湿度 Operating humidity	°C	0~70%	

### 5. 典型光谱曲线(Typical Spectral Curve):



### 6. 订购信息 (information):

宽带光源 ASE	光谱范围 Spectral range	平坦度 Flatness	输出功率 Output power	输出尾纤 Pigtail fiber	尺寸 Dimension
	C: C-Band	F: ≤7dB	10: 10mW 20: 20mW 30: 30mW 50: 50mW	SM: SMF-28e	M10: Module M15: Module