江苏田信塑料光纤有限公司

Jiangsu TX Plastic Optical Fibers Co.,Ltd

通体发光塑料光纤

产品规格书

Side Glow Optic Fiber

Product specifications

TX-SFL8000-1

2023.01

www.txpof.com

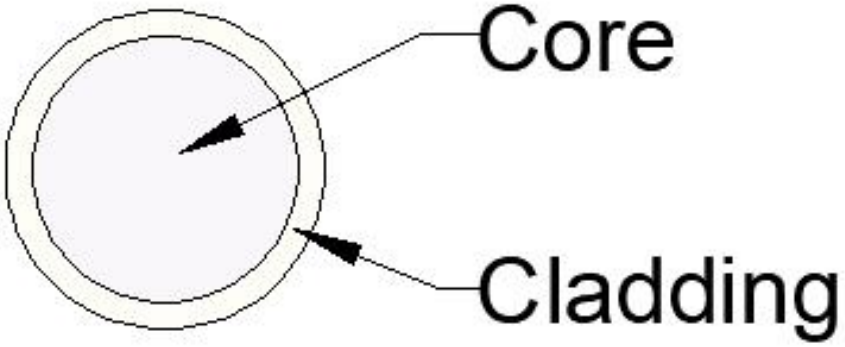
1. 产品名称(Product name)：通体发光塑料光纤(Side Glow Optic Fiber)

2. 产品型号(Product model)：TX-SFL8000-1

3. 产品结构(Product mix)：

项目(Item)		技术参数(Technical parameter)	单位(Unit)
塑料光纤 Plastic optical fiber	纤芯材料 (Core material)	甲基丙烯酸甲酯(MMA)	——
	包层材料 (Cladding material)	氟乙烯-四氟乙烯共聚物(FEP)	——
	纤芯折射率 (Core refractive index)	1.475	——
	包层折射率 (Cladding refractive index)	1.375	——
	纤芯直径 (Core diameter)	7500±150	μm
	包层直径 (Cladding diameter)	8000±200	μm
	纤芯数量 (Number of cores)	1	cores
产品标准(Product standard)		ROHS,REACH,SGS,（YD/T 1447–2013）	——

4. 产品结构示意图(Product structure diagram)：



TX-SFL8000-1
Structure diagram

5. 产品性能(Product performance)：

项目(Item)		试验条件 (Test conditions)	检验结果 (Inspection results)
工作温度(Operation Temperature)		No deterioration of optical properties (In a dry environment)	-20℃≤Temperature≤70℃
光学性能 Optical performance	衰减 (Attenuation)	@650nm	≤320dB/km
机械性能 Mechanical properties	拉伸屈服强度 (Tensile yield strength)	Loading rate: 100mm/min Sample length: 100~200mm Duration: reach 4% elongation	Tensile load: ≥70N
	最小弯曲半径 (Minimum bending radius)	Number of coils per time: 6 Number of cycles: 10 Attenuation change ≤ 2dB	Minimum bending radius: 80mm
	冲击附加衰减 (Additional attenuation of impact)	Radius of impact surface:12.5mm Impact energy: 0.2N • M Impact times: at least 3 times, and the distance between each impact point shall be at least 500mm	Attenuation change ≤2dB
	反复弯曲附加衰减 (Repeated bending additional attenuation)	Bending radius: 80mm Number of cycles: 200 Load: 5N	Attenuation change ≤2dB
	扭转附加衰减 (Torsional additional attenuation)	Number of cycles: 5 Torsional length: 250mm Torsion angle: ± 180 ° Axial tension: 5N	Attenuation change ≤2dB

*以上所有的测试，均在温度 25℃、湿度 50%下进行，除非另有说明。
All the above tests are conducted at 25 ℃ and 50% humidity, unless otherwise specified.