Gem Optoelectronic Technology Co.,Ltd.

O&E Package Solution

Product Specification

Spec#：TO52 Cap（Tilt window）

AFN：JDFZ-JS-E07

VER：000

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1. Product Description

1.1 Specifications：TO52 Cap（Tilt window）

1.2 Drawing No.：HP1004006B

2. Product Specifications

2.1 Substrate Specifications

2.1.1 Material：Shell: 4J50，Window: D263T

2.1.2 Size：Shell: Tilt angel 17° H = 3.4-10° φ3.0，Window: φ4.1×0.3

2.1.3 Surface quality：Clear aperture optical surface conforms to MIL-PRF-13830B 60/40

Effective light transmission MIL-PRF-13830B 40/20, no pocking

2.1.4 Soldering：HFJD low-temperature glass 1#(radiation resistant glass) sintering packaging

2.2 Finished Product Specification

Dimension (mm)	Depth（mm）	Effective Clear Aperture（mm）
3.4 max, Tilt angle 17°	1.75min	Φ2.5min

2.3 Spectrum Specifications

AR Coating on both sides: T > 99%@1500-1660nm

2.4 Airtightness

Leakage rate<1X10^{-8} Pa·m^3/s He

3. Appearance Quality

Item		Criteria		Instruments
Glass	gap(periphery)	Depth	acceptable< 0.2 mm	Microscope
		Width	acceptable< 0.2 mm	
	pocking	According to the drawing		Microscope
	scratches	Total length ≤ ¼ diameter, width≤0.04mm		Microscope
Soldering	air bubbles	<Welding area¼ Acceptable Welding area1/4 ~ ½ Qty≤3 Acceptable >Welding area ½ Not allowed		Microscope

	packaging	Welding area without notch, impurities and other defects.	
	overflow of solder	functional area≥ Minimum effective through-light aperture	
Shell	burr	Maximum: 0.02mm	Microscope
	spots	Covered with a metallized layer and intact	
	rust	Not allowed	
	color	No local color difference, the overall color uniform acceptable.	
	surface	No fouling, bubbling, oxidizing black spot and other welding pollution.	Microscope

4.Reliability test

Item	Methods	Criteria	Sampling	Instruments
Solderability	Soldering in high temperature 400°C. After cooling down, using thrust meter to detect thrust.	Trust of welding > 3kg/mm2	Per lot	Thrust meter
High temperature boiling	100℃/0.095-0.105Mpa/10H	Air tightness <1X10^{-8} Pa·m^3/s He	Per lot	High temperature cooking equipment Leak detector

5. Package

5.1 The product packaging box uses anti-static materials to ensure the cleanliness of the packaging box and ensure that the materials will not be polluted and corroded.

5.2 The boxes are packed into clean bags, filled with desiccant and vacuum baled.

5.3 The vacuum packaging bag is attached with a label, which contains: Lot No., product name, quantity, delivery date, and company name.

5.4 The packing box needs to have flexible materials such as foam to ensure that the vacuum of the packing box does not fail and is not damp.

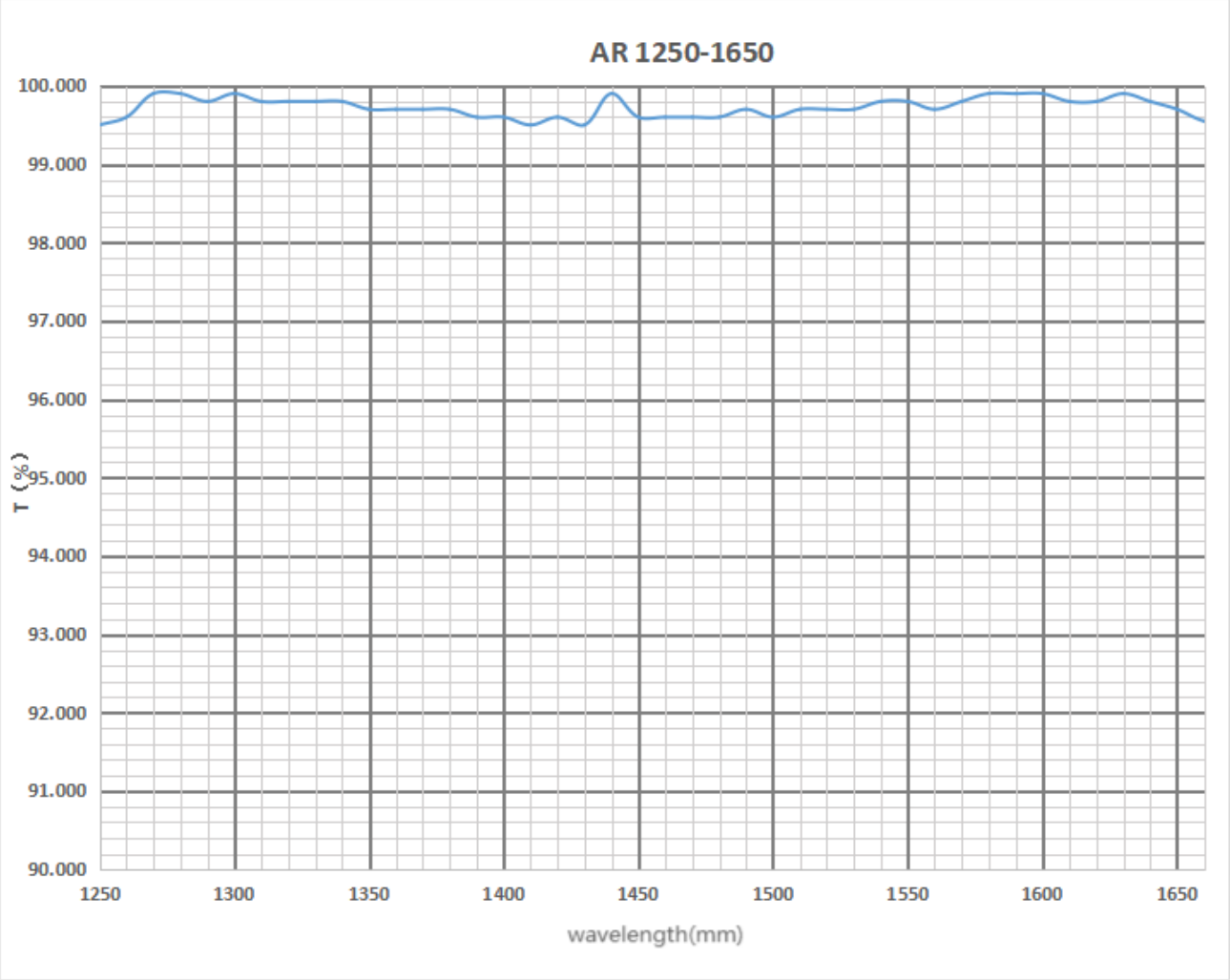
6. Shipping

6.1 The products should be packed in a sturdy box. The box should meet fragile goods transport requirements.

6.2 Avoid direct exposure to the rain, snow and mechanical collision during transportation.

6.3 Inspection reports should be packed in the packing box and the report should meet the requirements according to the drawings.

7. Spectrum


AR 1250-1650
100.000
99.000
98.000
97.000
96.000
95.000
94.000
93.000
92.000
91.000
90.000
T (%)
1250
1300
1350
1400
1450
1500
1550
1600
1650
wavelength(mm)

8. Drawing No.：HP1004021B