



NOTES

1. DESIGN WAVELENGTH: $10.6 \mu\text{m}$
2. OPERATION WAVELENGTH: $7 \mu\text{m}-12 \mu\text{m}$
3. DIAMETER TOLERANCE: $+0.0/-0.1 \text{mm}$
4. THICKNESS TOLERANCE: $\pm 0.1 \text{mm}$
5. FOCAL LENGTH: $f=75.0 \text{mm} \pm 1\%$
6. BACK FOCAL LENGTH(REF): $bf=73.0 \text{mm}$
7. CLEAR APERTURE: $>90\%CA$
8. SURFACE QUALITY(S/D)(S1,S2): 40/20
9. SURFACE FLATNESS(S1): $\lambda/2 @ 632.8 \text{nm}$
10. SURFACE POWER(S2): $3\lambda/2 @ 632.8 \text{nm}$
11. SURFACE IRREGULARITY(S2): $\lambda/4 @ 632.8 \text{nm}$
12. CENTRATION: $<3 \text{ arcmin}$
13. CHAMFER: $<0.2 \text{mm}, 45^\circ$
14. COATING(S1,S2): $T_{\text{avg}} \geq 97\%$, $T_{\text{abs}} \geq 92\%$,
 $R_{\text{avg}} \leq 1\%$, $R_{\text{abs}} \leq 2\% @ 7 \mu\text{m}-12 \mu\text{m}$

| | PART DESCRIPTION | MATERIAL |
|---|------------------|--------------------|
| ① | SM1-8A | ANODIZED ALUMINIUM |
| ② | CX90612-E3 | ZNSE |
| ③ | SM1R | ANODIZED ALUMINIUM |

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|--|--|--------|--|---|--|---|--------|-------|-----|
| DRAWING PROJECTION | | | | <h1 style="color: red; margin: 0;">LBTEK</h1> | | | | | |
| | | | | | | | | | |
| | | NAME | | DATE | | MCX90612-E3 | | | |
| DRAWN | | BSHU | | Aug./12th/24 | | <small>ZNSE, D=25.4 mm, f=75.0 mm PLANO CONVEX LENS AR. 7 $\mu\text{m}-12 \mu\text{m}$</small> | | | |
| APPROVAL | | WCHENG | | Aug./12th/24 | | MATERIAL | WEIGHT | SCALE | REV |
| FOR INFORMATION ONLY NOT FOR MANUFACTURING PURPOSES | | | | | | ZnSe | 19.73g | 2:1 | B |