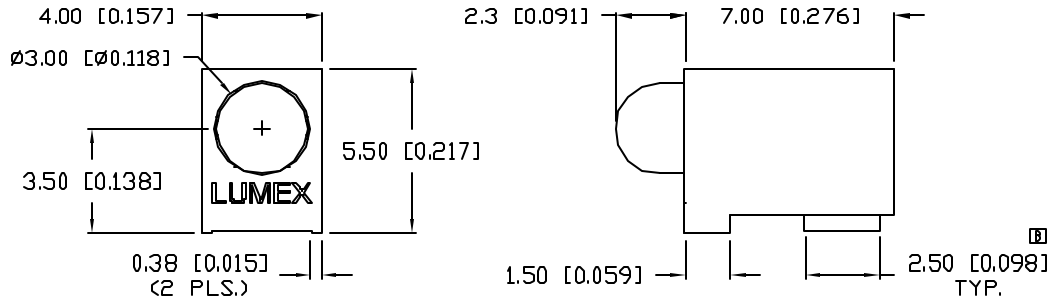
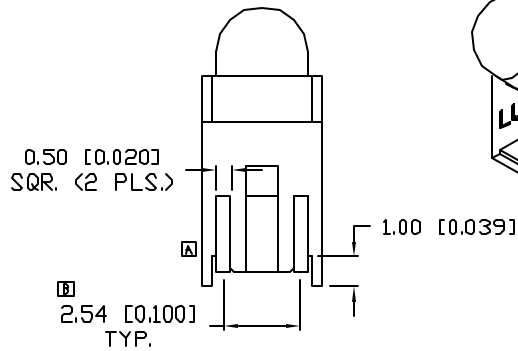


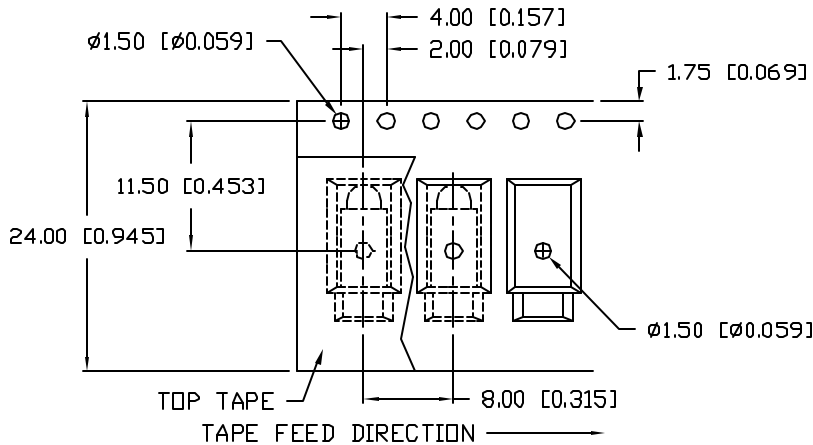
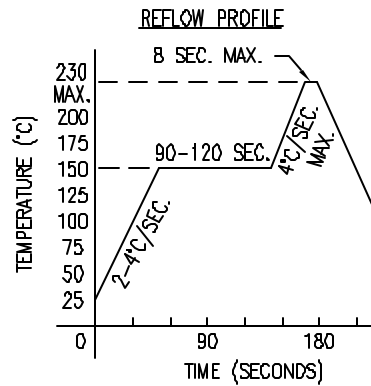
UNCONTROLLED DOCUMENT



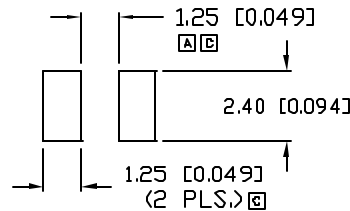
ANODE CATHODE



PATENT PENDING



RECOMMENDED SOLDER PAD LAYOUT



PART NUMBER
SSF-LXH305USBD(-TR)

REV.

C

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE |
|------|-------------------------------------|---------|
| A | E.C.N. #10782. | 11.6.01 |
| B | E.C.N. #10855 | 4.22.02 |
| C | E.C.N. #10864. | 5.15.02 |

CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ $I_f=20\text{mA}$

| PARAMETER | MIN | TYP | MAX | UNITS | TEST COND |
|--------------------|---------------|-----|-----|----------|----------------------|
| PEAK WAVELENGTH | | 470 | | nm | |
| FORWARD VOLTAGE | | 3.5 | 4.0 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_f=100\mu\text{A}$ |
| AXIAL INTENSITY | | 80 | | mcd | $I_f=20\text{mA}$ |
| VIEWING ANGLE | | 60 | | 2x theta | |
| EMITTED COLOR: | BLUE | | | | |
| EPOXY LENS FINISH: | BLUE DIFFUSED | | | | |

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|--------------------------------|------------|----------------------|
| PEAK FORWARD CURRENT* | 100 | mA |
| STEADY CURRENT | 30 | mA |
| POWER DISSIPATION | 98 | mW |
| DERATE FROM 25°C | -1.6 | mW/ $^\circ\text{C}$ |
| OPERATING, STORAGE TEMP. | -40 TO +85 | $^\circ\text{C}$ |
| SOLDERING TEMP. | +260 | $^\circ\text{C}$ |
| 2.0mm FROM BODY | | 3 SEC. MAX |

* $t < 10\mu\text{s}$

NOTES:

1. SSL-LX305F4USBD, BLUE LED.
2. SSH-LXH305, BLACK HOLDER.
3. -TR SUFFIX TO DESIGNATE TAPE AND REEL SUPPLIED.
4. CARRIER TAPE #LXP-CARRIER24-56.

UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.005), LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), MIN.=^{+DECIMAL PRECISION}_{-0.00}, MAX.=^{+0.00}_{-DECIMAL PRECISION}

REV. C PART NUMBER SSF-LXH305USBD(-TR)

T-3mm (T-1) RIGHT ANGLE SURFACE MOUNT LED,
470nm ULTRA SUPER BLUE LED,
BLUE DIFFUSED LENS, TAPE AND REEL.

CONFIDENTIAL INFORMATION

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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