

UNCONTROLLED DOCUMENT

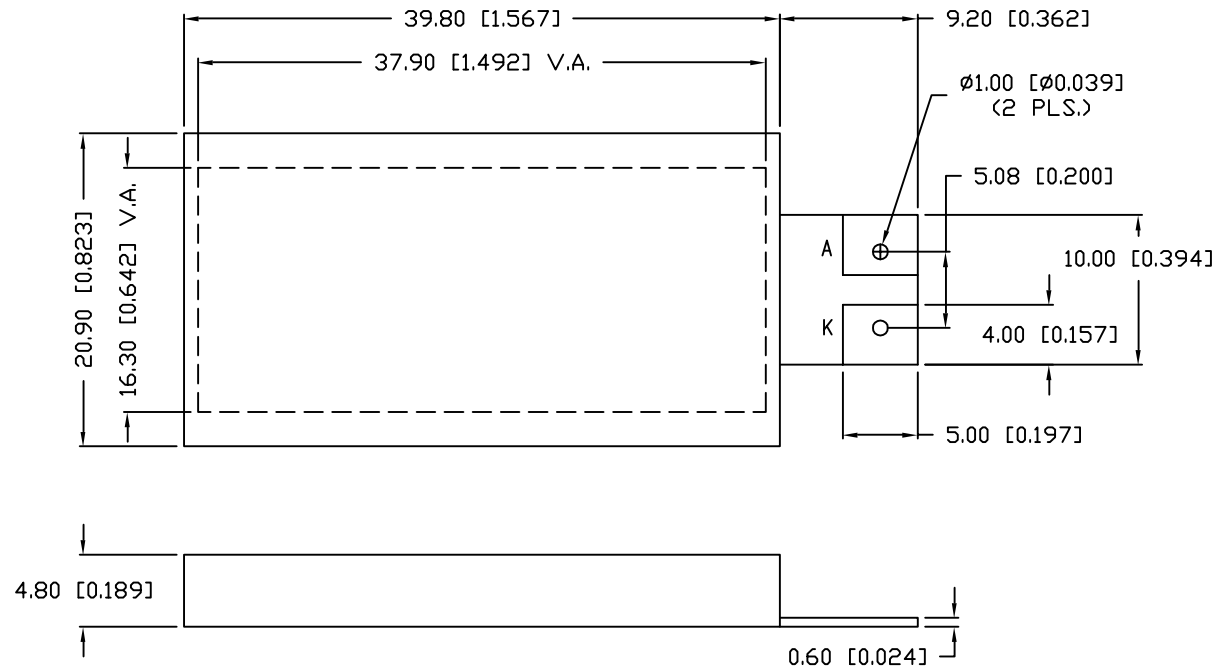
SC:0.50

PART NUMBER

REV.

SSB-COB3816SRW

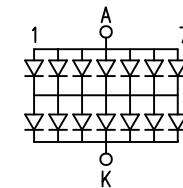
PRELIMINARY IN P/N DIR



| ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ PER MODULE |                      |     |     |                 | $I_f=70\text{ mA}$   |
|-------------------------------------------------------------------|----------------------|-----|-----|-----------------|----------------------|
| PARAMETER                                                         | MIN                  | TYP | MAX | UNITS           | TEST COND            |
| PEAK WAVELENGTH                                                   |                      | 660 |     | nm              |                      |
| FORWARD VOLTAGE                                                   |                      | 3.4 | 4.0 | $V_f$           |                      |
| REVERSE VOLTAGE                                                   | 8                    |     |     | $V_r$           | $I_r=100\mu\text{A}$ |
| LUMINOUS INTENSITY                                                |                      | 200 |     | $\text{cd/m}^2$ | $I_f=70\text{ mA}$   |
| EMITTED COLOR:                                                    | RED                  |     |     |                 |                      |
| REFLECTOR FINISH:                                                 | MILKY WHITE DIFFUSED |     |     |                 |                      |

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$  PER MODULE

| PARAMETER                              | MAX        | UNITS                      |
|----------------------------------------|------------|----------------------------|
| STEADY CURRENT                         | 112        | mA                         |
| POWER DISSIPATION                      | 500        | mW                         |
| DERATE FROM $25^\circ\text{C}$ PER DIE | -1.2       | $\text{mW}/^\circ\text{C}$ |
| OPERATING TEMP.                        | -40 TO +85 | $^\circ\text{C}$           |
| STORAGE TEMP.                          | -40 TO +85 | $^\circ\text{C}$           |
| SOLDERING TEMP.                        | +260       | $^\circ\text{C}$           |
| 2.0mm FROM BODY                        | 3 SEC. MAX |                            |



2 CHIPS IN SERIES  
7 PARALLEL BRANCHES

UNCONTROLLED DOCUMENT

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

REV.

PART NUMBER

SSB-COB3816SRW

38mm x 16mm VIEW AREA, CHIP ON BOARD LED  
BACKLIGHT, 660nm RED, 14 CHIPS, 3.4V @ 70mA

## CONFIDENTIAL INFORMATION

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

## 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.



290 E. HELEN ROAD  
PALATINE, IL 60067-6976  
PHONE: +1.847.359.2790  
US WEB: www.lumex.com  
TW WEB: www.lumex.com.tw

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE: 8.13.07

JN

PAGE: 1 OF 1

SCALE: N/A