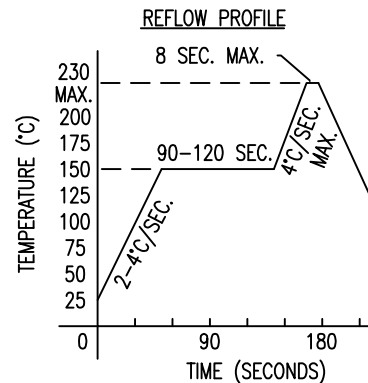
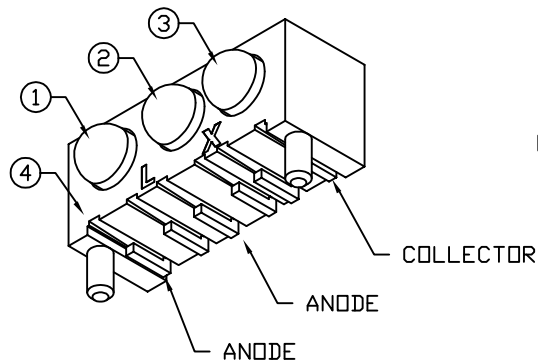
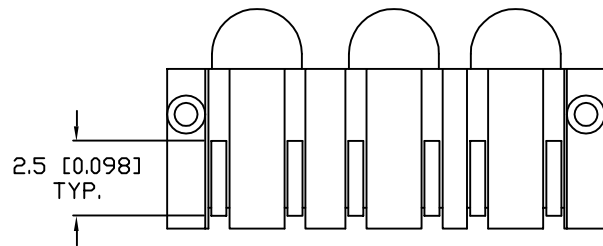
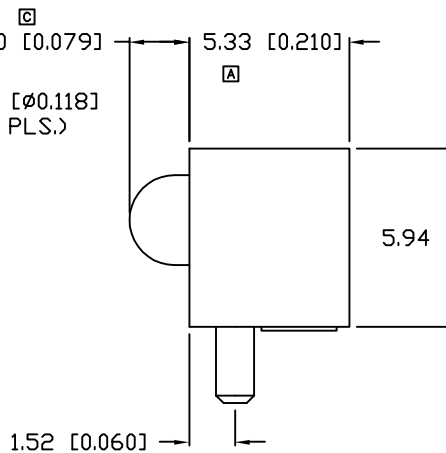
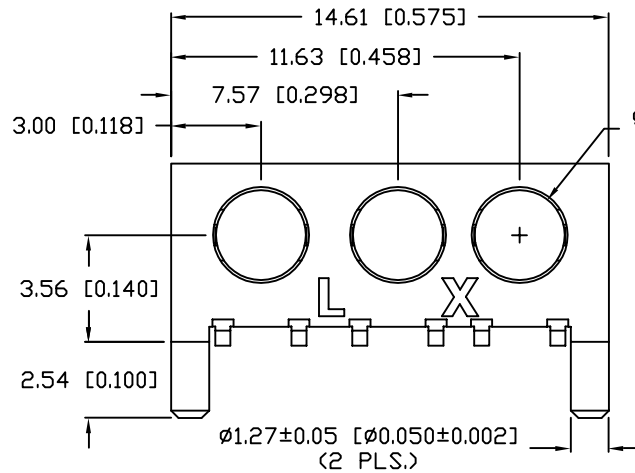




NOTES:

1. SSL-LX305F4GD, GREEN LED.
2. OED-EL305F4C50-HT, INFRARED EMITTER.
3. OED-ST305F4B50, INFRARED DETECTOR.
4. SSH-LXH335, BLACK PPS HOLDER, 94V-0.
5. ELECTRICAL SPECS FOR INFRARED DEVICES ARE ON PAGE 2.

PART NUMBER			REV.
SSF-LXH335GD-STEL			C
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE	
A	E.C.N. #11058.	11.18.03	
B	E.C.N. #11259.	7.12.05	
C	E.C.N. #11416.	7.12.05	

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

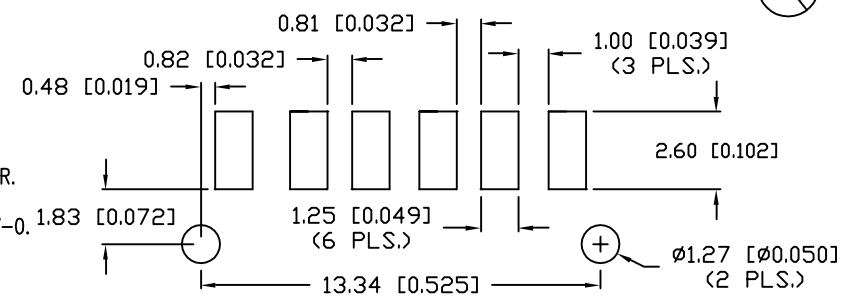
PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		565		nm	
FORWARD VOLTAGE		2.2	2.6	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_r=100\mu\text{A}$
AXIAL INTENSITY		30		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		60		2x theta	
EMITTED COLOR:	GREEN				
EPOXY LENS FINISH:	GREEN DIFFUSED				

LIMITS OF SAFE OPERATION AT 25°C PER CHIP

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	150	mA
STEADY CURRENT	25	mA
POWER DISSIPATION	105	mW
DERATE FROM 25°C	-1.6	mW/ $^\circ\text{C}$
OPERATING, STORAGE TEMP.	-40 TO +85	$^\circ\text{C}$

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

RECOMMENDED SOLDER PAD LAYOUT



*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.

C

PART NUMBER

SSF-LXH335GD-STEL

3mm SMT, RIGHT ANGLE PCB INDICATOR,

565nm GREEN, 940nm IR, AND PHOTOTRANSISTOR.

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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CHECKED BY:

APPROVED BY:

DATE: 5.12.03

PAGE: 1 OF 2

SCALE: N/A

INFRARED EMITTER

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		940		nm	
SPECTRAL BANDWIDTH		50		nm	
FORWARD VOLTAGE		1.2	1.6	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_r=10\mu\text{A}$
RADIANT INTENSITY	7	15		mW/SR	$I_f=20\text{mA}$
HALF ANGLE		± 25		degrees	
EPOXY LENS FINISH: WATER CLEAR					

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	1.2	A
STEADY CURRENT	50	mA
POWER DISSIPATION	100	mW
DERATE FROM 25°C	- 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

* $t_p < 100\mu\text{S}$, $t_p/T=0.01$

PHOTOTRANSISTOR

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
SPECTRAL SENSITIVITY		940		nm	
C/E BREAKDOWN VOLTAGE	30			V	$I_c=100\mu\text{A}$ $E_e=0.0\text{ mW}/\text{cm}^2$
E/C BREAKDOWN VOLTAGE	5.0			V	$I_c=100\mu\text{A}$ $E_e=0.0\text{ mW}/\text{cm}^2$
C/E SATURATION VOLTAGE			0.8	V	$I_c=2\text{mA}$ $E_e=20\text{ mW}/\text{cm}^2$
COLLECTOR DARK CURRENT			100	nA	$V_{ce}=10\text{V}$ $E_e=0.0\text{ mW}/\text{cm}^2$
COLLECTOR ON CURRENT	0.3	1.0		mA	$V_{ce}=5\text{V}$ $E_e=1.0\text{ mW}/\text{cm}^2$
SWITCHING TIME		3		μS	$I_c=1\text{mA}$ $V_{ce}=5\text{V}, R_L=1000\Omega$
EPOXY FINISH: BLUE TRANSPARENT					

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
C/E BREAKDOWN VOLTAGE	30	V
E/C BREAKDOWN VOLTAGE	5	V
POWER DISSIPATION	100	mW
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		5 SEC. MAX

*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 -0.00 MAX.=+0.00 -DECIMAL PRECISION

REV.

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