

◆ABSOLUTE MAXIMUM RATING:(Ta=25°C)

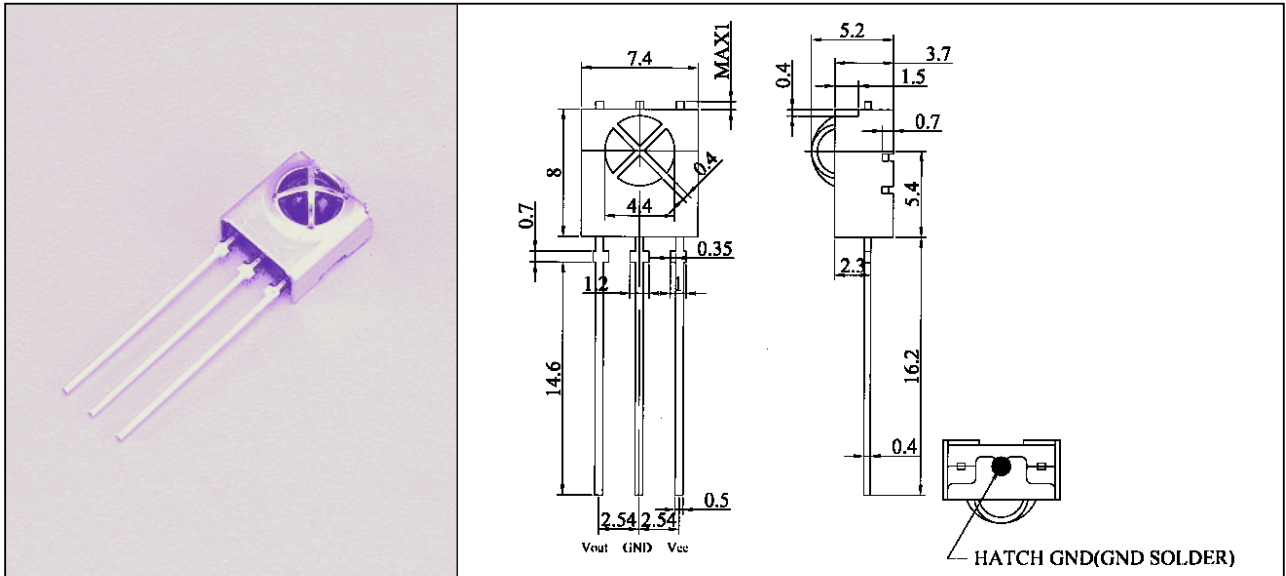
PARAMETER	Test Conditions	Symbol	Value	Unit
Supply Voltage	-	Vcc	3~5	V
Output Voltage	-	Vout	3~5	V
Output Current	-	Io	2.5	mA
Junction Temperature	-	Tj	100	°C
Storage Temperature Range	-	Tstg	-25°C to 85°C	°C
Operating Temperature Range	-	Totr	-25°C to 85°C	°C
Power Consumption	(Tamb ≧ 85°C)	Ptot	50	mw
Soldering Temperature	t ≦10s, 1mm from case	Tsd	260	°C

◆ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Supply Current	Icc	-	0.8	1.5	mA	Iin=0 uA
Max. Input Current	Iin	0.3	-	0.8	mA	Vin=0 V
Max. Voltage Gain	Av	80	95	110	dB	Fin=37.9 KHz Vin=30 uVp-p AGC off
Frequency Range	f	-	37.9	-	KHz	-
Output Pulse Width	tPW1	500	600	700	us	Fin=37.9 KHz burst wave Vin=500 uVp-p
	tPW2	500	600	700	us	Fin=37.9 KHz burst wave Vin=50 uVp-p
Low Level Output Voltage	Vol	-	0.2	0.4	V	-
High Level Output Voltage	Voh	2.8	3.0	-	V	-
Arrival Distance	d	-	16	-	m	L-514EIR1C If=300 mA

1.All dimension are in millimeters(inches).

2.Tolerance is ±0.25mm(0.01")unless otherwise specified.



◆ABSOLUTE MAXIMUM RATING:(Ta=25°C)

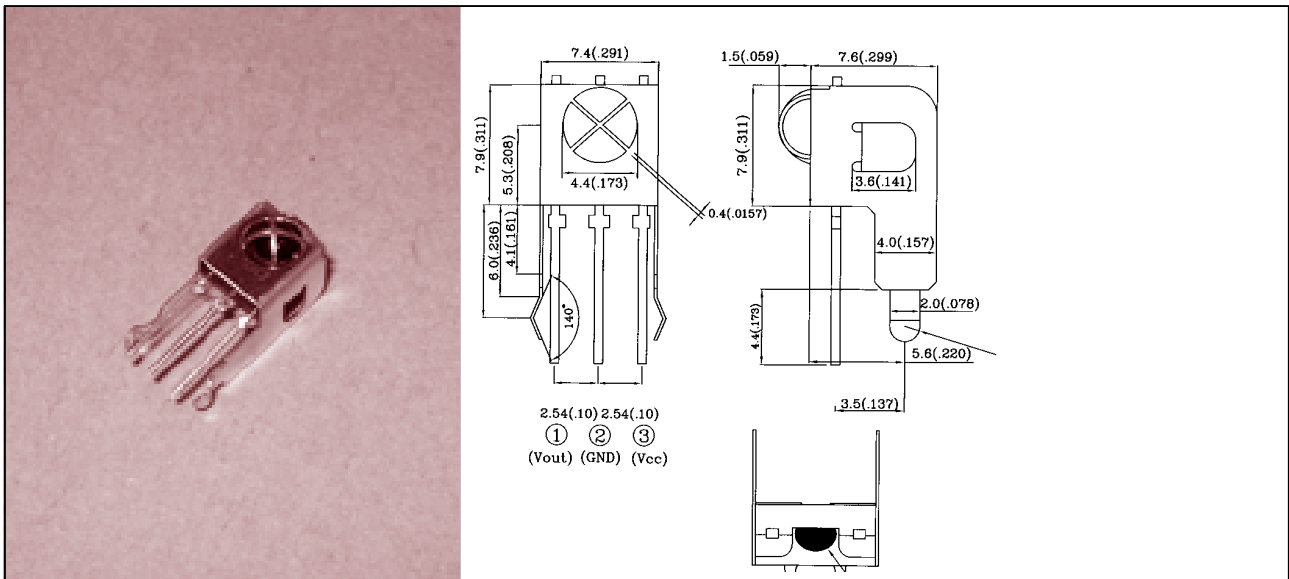
PARAMETER	Test Conditions	Symbol	Value	Unit
Supply Voltage	-	Vcc	4.5~5.5	V
Output Voltage	-	Vout	4.5~5.5	V
Output Current	-	Io	5	mA
Junction Temperature	-	Tj	100	°C
Storage Temperature Range	-	Tstg	-25°C to 85°C	°C
Operating Temperature Range	-	Totr	-25°C to 85°C	°C
Power Consumption	-	Ptot	50	mw
Soldering Temperature	t ≤10s, 1mm from case	Tsd	260	°C

◆ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Supply Current	Icc	0.9	1.2	1.5	mA	Iin=0 uA
Max. Input Current	Iin	-	1.0	-	mA	Vin=0 V
Max. Voltage Gain	Av	50	52	53	dB	Fin=37.9 KHz Vin=30 uVp-p AGC off
Frequency Range	f	-	38.0	-	KHz	-
Output Pulse Width	tPW1	500	600	700	us	Fin=37.9 KHz burst wave Vin=500 uVp-p
	tPW2	500	600	700	us	Fin=37.9 KHz burst wave Vin=50 uVp-p
Low Level Output Voltage	Vol	-	0.20	0.25	V	-
High Level Output Voltage	Voh	4.5	-	5.5	V	-
Arrival Distance	d	-	35	-	m	L-514EIR1C If=300 mA

1.All dimension are in millimeters(inches).

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◆ABSOLUTE MAXIMUM RATING:(Ta=25°C)

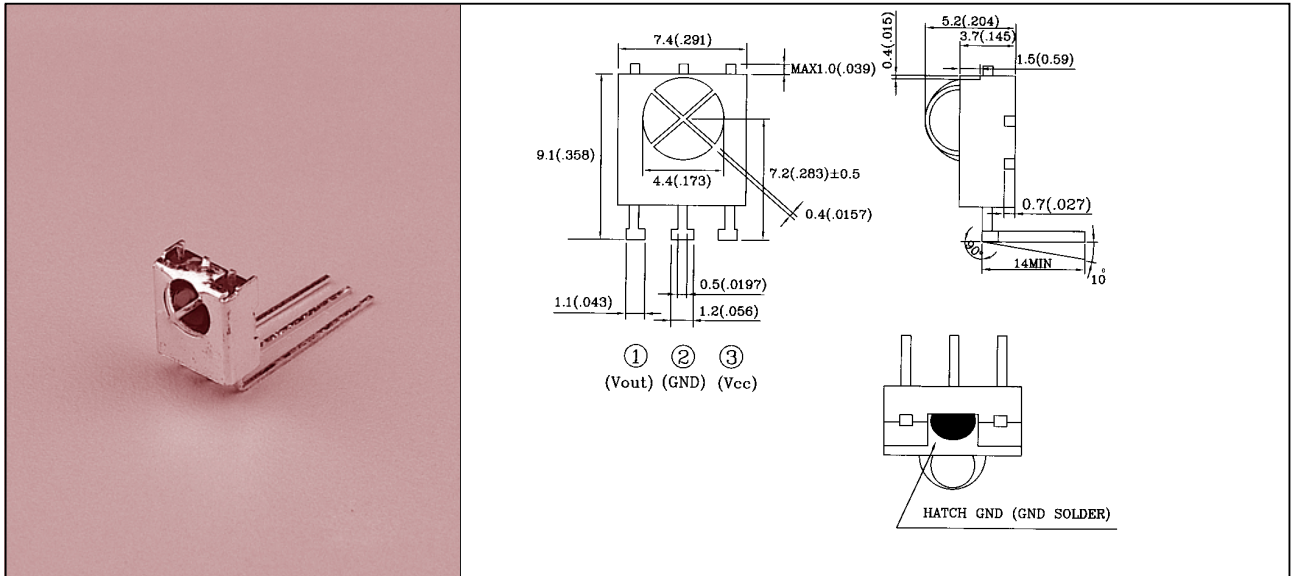
PARAMETER	Test Conditions	Symbol	Value	Unit
Supply Voltage	-	Vcc	4.5~5.5	V
Output Voltage	-	Vout	4.5~5.5	V
Output Current	-	Io	5	mA
Junction Temperature	-	Tj	100	°C
Storage Temperature Range	-	Tstg	-25°C to 85°C	°C
Operating Temperature Range	-	Totr	-25°C to 85°C	°C
Power Consumption	-	Ptot	50	mw
Soldering Temperature	t ≤ 10s, 1mm from case	Tsd	260	°C

◆ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Supply Current	Icc	0.9	1.2	1.5	mA	Iin=0 uA
Max. Input Current	Iin(max)	-	1	-	mA	Vin ≥ 0V ; Vs=5V Tamb=25°C
Max. Voltage Gain	Av	50	52	53	dB	Fin=37.9 KHz Vin=30 uVp-p AGC off
Frequency Range	f	-	38.0	-	KHz	-
Output Pulse Width	tPW1	500	600	700	us	Fin=37.9 KHz burst wave Vin=500 uVp-p
	tPW2	500	600	700	us	Fin=37.9 KHz burst wave Vin=50 uVp-p
Low Level Output Voltage	Vol	-	0.20	0.25	V	-
Hight Level Output Voltage	Voh	4.5	-	5.5	V	-
Arrival Distance	d	-	35	-	m	L-514EIR1C IF=300 mA

1.All dimension are in millimeters(inches).

2.Tolerance is ±0.25mm(0.01")unless otherwise specified.



◆ABSOLUTE MAXIMUM RATING:(Ta=25°C)

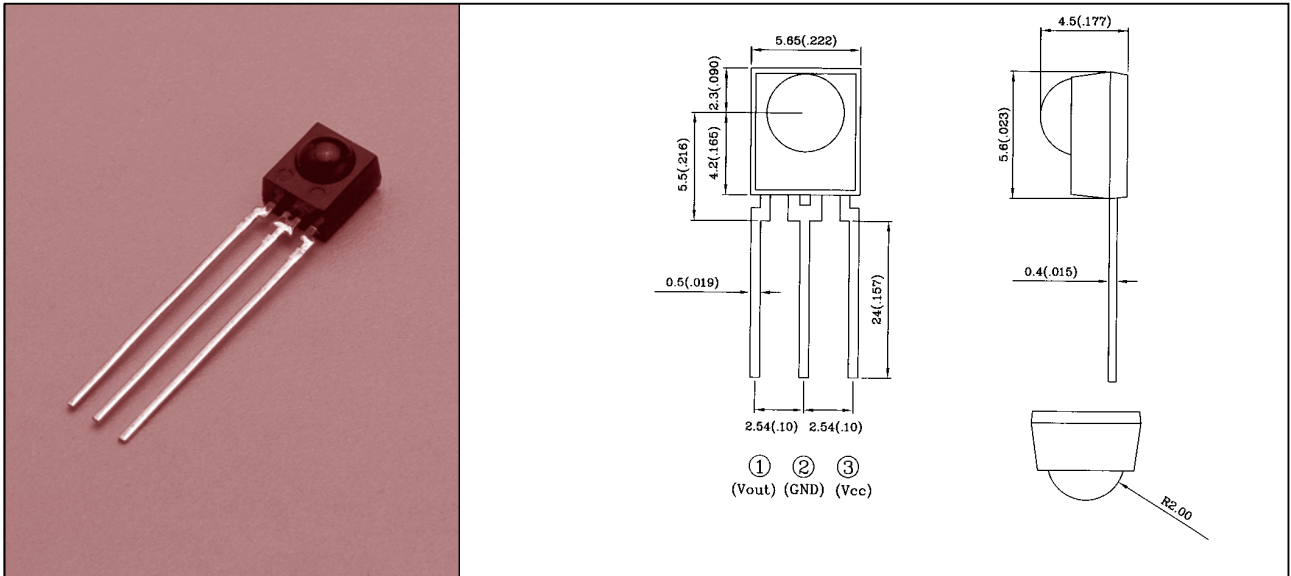
PARAMETER	Test Conditions	Symbol	Value	Unit
Supply Voltage	-	Vcc	4.5~5.5	V
Output Voltage	-	Vout	4.5~5.5	V
Output Current	-	Io	5	mA
Junction Temperature	-	Tj	100	°C
Storage Temperature Range	-	Tstg	-25°C to 85°C	°C
Operating Temperature Range	-	Totr	-25°C to 85°C	°C
Power Consumption	-	Ptot	50	mw
Soldering Temperature	t ≤ 10s, 1mm from case	Tsd	260	°C

◆ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Supply Current	Icc	0.9	1.2	1.5	mA	Iin=0 uA
Max. Input Current	Iin(max)	-	1	-	mA	Vin ≥ 0V ; VS=5V Tamb=25°C
Max. Voltage Gain	Av	50	52	53	dB	Fin=37.9 KHz Vin=30 uVp-p AGC off
Frequency Range	f	-	38.0	-	KHz	-
Output Pulse Width	tPW1	500	600	700	us	Fin=37.9 KHz burst wave Vin=500 uVp-p
	tPW2	500	600	700	us	Fin=37.9 KHz burst wave Vin=50 uVp-p
Low Level Output Voltage	Vol	-	0.20	0.25	V	-
Hight Level Output Voltage	Voh	4.5	-	5.5	V	-
Arrival Distance	d	-	35	-	m	L-514EIR1C IF=300 mA

1.All dimension are in millimeters(inches).

2.Tolerance is ±0.25mm(0.01")unless otherwise specified.



◆ABSOLUTE MAXIMUM RATING:(Ta=25°C)

PARAMETER	Test Conditions	Symbol	Value	Unit
Supply Voltage	-	Vcc	4.5~5.5	V
Output Voltage	-	Vout	4.5~5.5	V
Output Current	-	Io	5	mA
Junction Temperature	-	Ti	100	°C
Storage Temperature Range	-	Tstg	-25°C to 85°C	°C
Operating Temperature Range	-	Totr	-25°C to 85°C	°C
Power Consumption	-	Ptot	50	mw
Soldering Temperature	t ≤ 10s, 1mm from case	Tsd	260	°C

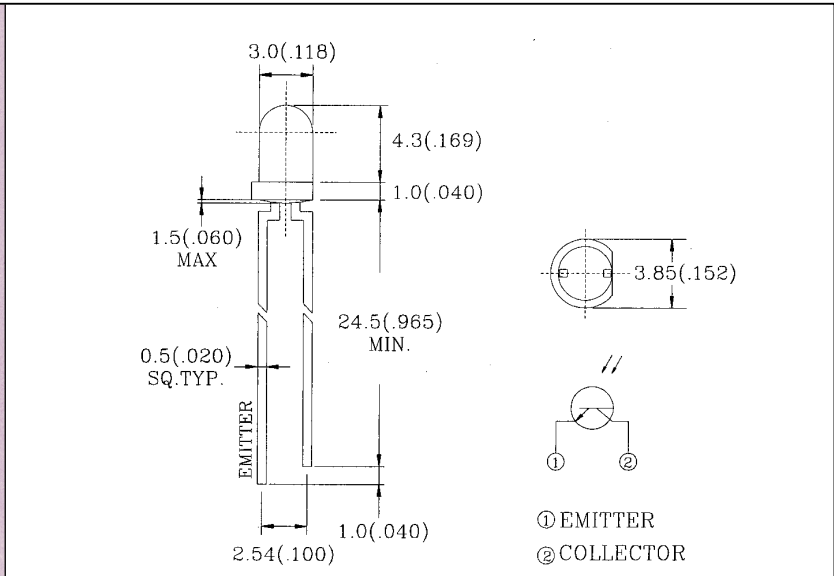
◆ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Supply Current	Icc	0.9	1.2	1.5	mA	Iin=0 uA
Max. Input Current	Iin(max)	-	1	-	mA	Vin ≥ 0V ; VS=5V Tamb=25°C
Max. Voltage Gain	Av	50	52	53	dB	Fin=37.9 KHz Vin=30 uVp-p AGC off
Frequency Range	f	-	38.0	-	KHz	-
Output Pulse Width	tPW1	500	600	700	us	Fin=37.9 KHz burst wave Vin=500 uVp-p
	tPW2	500	600	700	us	Fin=37.9 KHz burst wave Vin=50 uVp-p
Low Level Output Voltage	Vol	-	0.20	0.25	V	-
Hight Level Output Voltage	Voh	4.5		5.5	V	-
Arrival Distance	d	-	35	-	m	L-514EIR1C IF=300 mA

1.All dimension are in millimeters(inches).

2.Tolerance is ±0.25mm(0.01")unless otherwise specified.

**L-31ROPT1XX 3.0mm PHOTOTRANSISTOR**



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>(BR)R</sub> (V)	Topr	Tstg
L-31ROPT1XX	10	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse break down voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

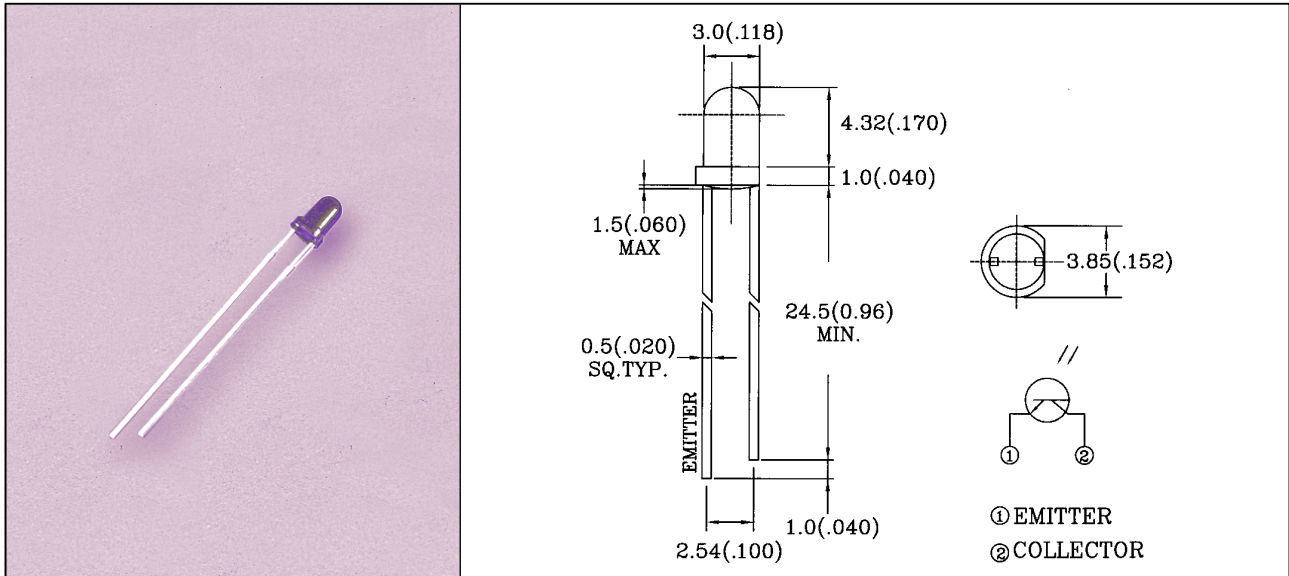
Part No.	BV <sub>CEO</sub> (V)			BV <sub>ECO</sub> (V)			I <sub>CEO</sub> (nA)			V <sub>CE(s)</sub> (V)			t <sub>r</sub> /t <sub>f</sub> (uS)			I <sub>c</sub> (mA)			C <sub>CB</sub> (pF)			λ (nm)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	PEAK	MAX
L-31ROPT1C	30			5					100			0.4	15/15			0.9	1.8			6.4			400	1050
L-31ROPT1D1	30			5					100			0.4	15/15			0.8	1.6			6.4			900	940
L-31ROPT1D2	30			5					100			0.4	15/15			0.8	1.6			6.4			800	870
<b>TEST CONDITION</b>	I <sub>C</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>E</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			V <sub>E</sub> =20V E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>C</sub> =2mA E <sub>e</sub> =0.5mW/cm <sup>2</sup>			V <sub>CE</sub> =5V I <sub>C</sub> =1mA R <sub>L</sub> =1000Ω			V <sub>CE</sub> =5V E <sub>e</sub> =0.1mW/cm <sup>2</sup>			f=1MHZ V <sub>CB</sub> =3V E <sub>e</sub> =0mW/cm <sup>2</sup>					
<b>PARAMETER</b>	COLLECTOR-EMITTER BREAKDOWN VOLTAGE			EMITTER-COLLECTOR BREAKDOWN VOLTAGE			COLLECTOR DARK CURRENT			COLLECTOR-EMITTER SATURATION VOLTAGE			RISE/FALL TIME			ON STATE COLLECTOR CURRENT			COLLECTOR -BASE CAPACITANCE			SPECTRAL SENSITIVITY WAVELENGTH		

D1,D2=BLACK

1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.

**L-32XOPT1XX 3.0mm PHOTOTRANSISTOR**



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>(BR)R</sub> (V)	Topr	Tstg
L-32XOPT1XX	10	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

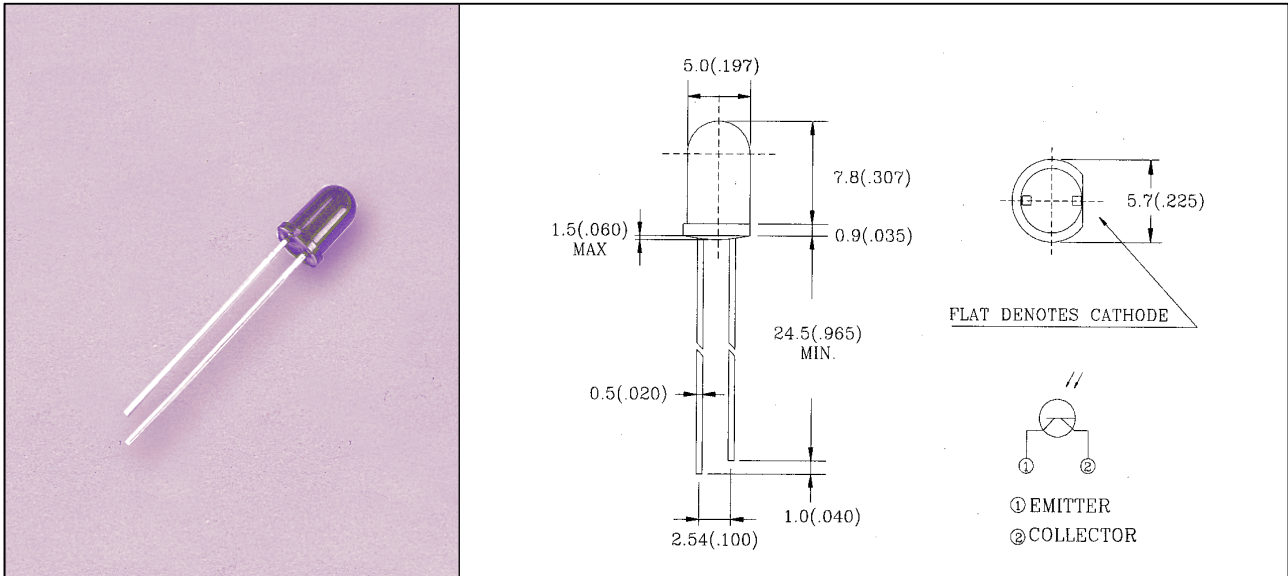
◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

Part No.	BV <sub>CEO</sub> (V)			BV <sub>ECO</sub> (V)			I <sub>CEO</sub> (nA)			V <sub>CE</sub> (s)(V)			tr/t <sub>f</sub> (uS)			I <sub>c</sub> (mA)			Δλ (nm)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX
L-32ROPT1D1	30			5					100			0.4		15/15		0.2	0.6		900	940	
L-32AOPT1D1	30			5					100			0.4		15/15		0.6	1.0		900	940	
<b>TEST CONDITION</b>	I <sub>C</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>E</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			V <sub>E</sub> =20V E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>C</sub> =2mA E <sub>e</sub> =0.5mW/cm <sup>2</sup>			V <sub>CE</sub> =5V I <sub>C</sub> =1mA R <sub>L</sub> =1000Ω			V <sub>CE</sub> =5V E <sub>e</sub> =0.1mW/cm <sup>2</sup>					
<b>PARAMETER</b>	COLLECTOR-EMITTER BREAKDOWN VOLTAGE			EMITTER-COLLECTOR BREAKDOWN VOLTAGE			COLLECTOR DARK CURRENT			COLLECTOR-EMITTER SATURATION VOLTAGE			RISE/FALL TIME			ON STATE COLLECTOR CURRENT			SPECTRAL SENSITIVITY WAVELENGTH		

D1,D2=BLACK

1.All dimension are in millimeters(inches).

2.Tolerance is ±0.25mm(0.01")unless otherwise specified.



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>(BR)R</sub> (V)	Topr	Tstg
L-51ROPT1XX	10	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse break down voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ± 5°C For 3 Seconds</b>				

◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

Part No.	BV <sub>CEO</sub> (V)			BV <sub>ECO</sub> (V)			I <sub>CEO</sub> (nA)			V <sub>CE(s)</sub> (V)			t <sub>r</sub> /t <sub>f</sub> (uS)			I <sub>c</sub> (mA)			C <sub>CB</sub> (pF)			λ (nm)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	PEAK	MAX
L-51ROPT1C	30			5					100			0.4	15	15		1.8	2.4			6.4		400		1050
L-51ROPT1D1	30			5					100			0.4	15	15		1.7	2.2			6.4		900	940	
L-51ROPT1D2	30			5					100			0.4	15	15		1.7	2.2			6.4		800	870	
<b>TEST CONDITION</b>	I <sub>C</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>E</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			V <sub>E</sub> =20V E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>C</sub> =2mA E <sub>e</sub> =0.5mW/cm <sup>2</sup>			V <sub>CE</sub> =5V I <sub>C</sub> =1mA R <sub>L</sub> =1000Ω			V <sub>CE</sub> =5V E <sub>e</sub> =0.1mW/cm <sup>2</sup>			f=1MHZ V <sub>CB</sub> =3V E <sub>e</sub> =0mW/cm <sup>2</sup>					
<b>PARAMETER</b>	<b>COLLECTOR-EMITTER BREAKDOWN VOLTAGE</b>			<b>EMITTER-COLLECTOR BREAKDOWN VOLTAGE</b>			<b>COLLECTOR DARK CURRENT</b>			<b>COLLECTOR-EMITTER SATURATION VOLTAGE</b>			<b>RISE/FALL TIME</b>			<b>ON STATE COLLECTOR CURRENT</b>			<b>COLLECTOR -BASE CAPACITANCE</b>			<b>SPECTRAL SENSITIVITY WAVELENGTH</b>		

D1,D2=BLACK

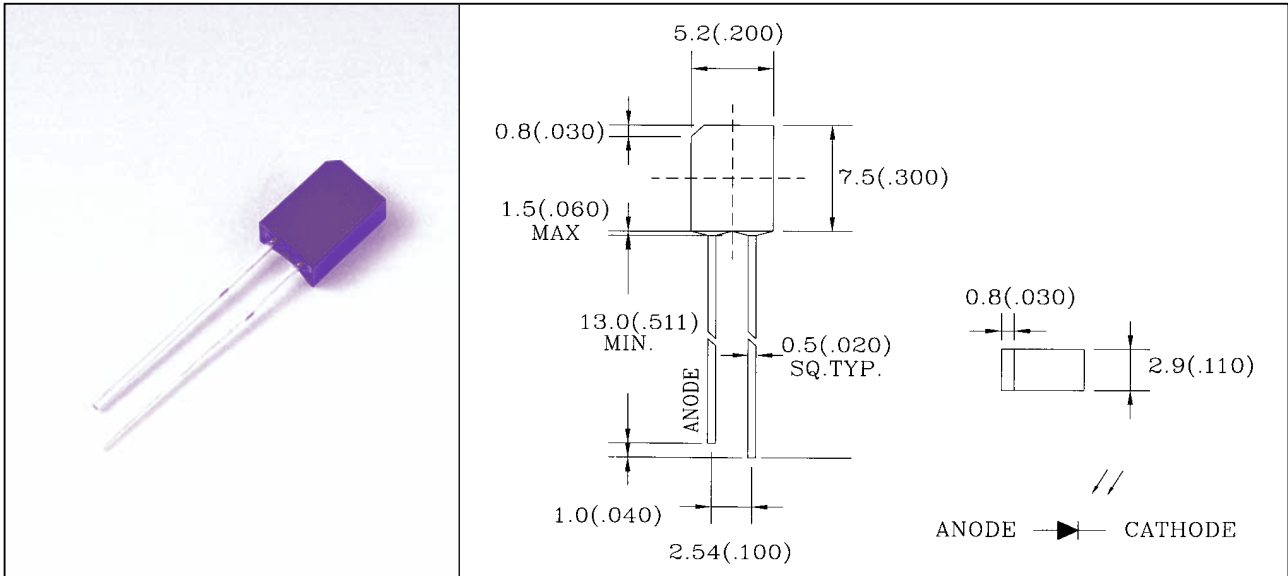
1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.





## L-SB1R9PD1XX PHOTODIODE



### ◆ABSOLUTE MAXIMUM RATING:(Ta=25°C)

Part No.	P <sub>D</sub> (mw)	V <sub>(BR)R</sub> (V)	Topr	Tstg
L-SB1R9PD1XX	0.1	30	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

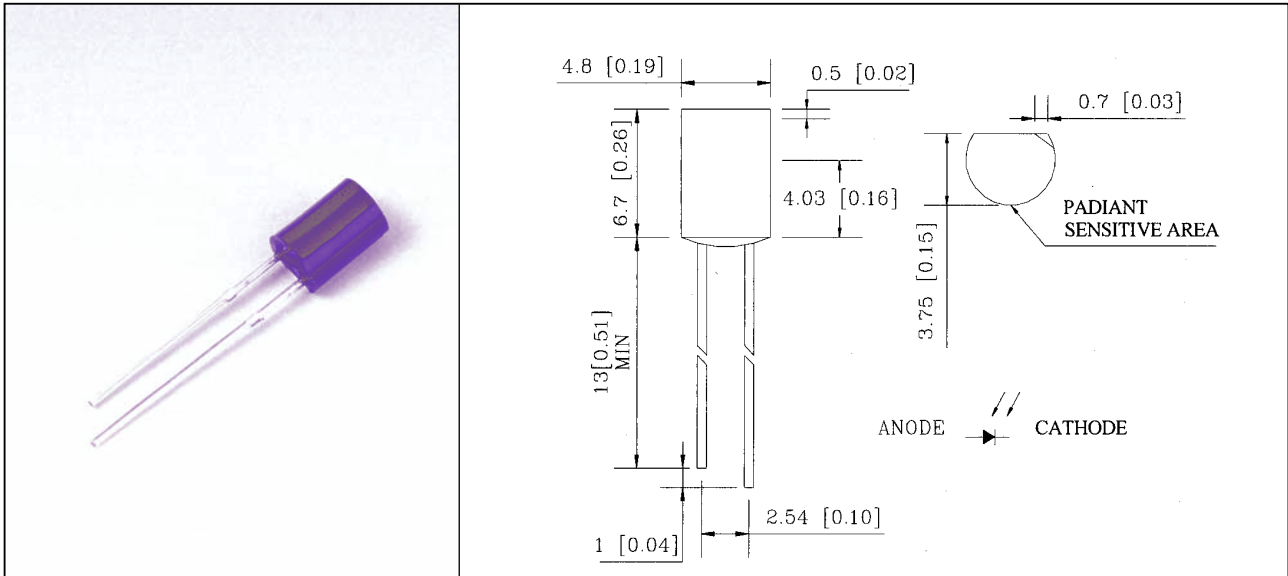
### ◆ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)

Part No.	I <sub>D</sub> (nA)			V <sub>(BR)R</sub> (V)			V <sub>OC</sub> (mV)			I <sub>L</sub> (uA)			ton/toff (nS)			C <sub>T</sub> (pF)			λ (nm)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	PEAK	MAX
L-SB1R9PD1C		5	30	33	170			390		30	40			45/45		18		400		1050	
L-SB1R9PD1D1		5	30	33	170			390		30	40			45/45		18		900	940		
L-SB1R9PD1D2		5	30	33	170			390		30	40			45/45		18		800	870		
<b>TEST CONDITION</b>	V <sub>R</sub> =10V Ee=0mW/cm <sup>2</sup>			I <sub>R</sub> =100uA Ee=0mW/cm <sup>2</sup>			λ <sub>c</sub> =940nm Ee=0.5mW/cm <sup>2</sup>			V <sub>R</sub> =5V Ee=0.1mW/cm <sup>2</sup>			V <sub>R</sub> =10V R <sub>L</sub> =100Ω			f=1MHZ V <sub>R</sub> =5V Ee=0mW/cm <sup>2</sup>					
<b>PARAMETER</b>	REVERSE DARK CURRENT			REVERSE BREAKDOWN VOLTAGE			OPEN CIRCUIT VOLTAGE			LIGHT CURRENT			TURN-ON TURN-OFF TIME			TOTAL CAPACITANCE			SPECTRAL SENSITIVITY WAVELENGTH		

D1,D2=BLACK

1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>(BR)R</sub> (V)	Topr	Tstg
L-SC1R9PD1XX	0.1	30	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

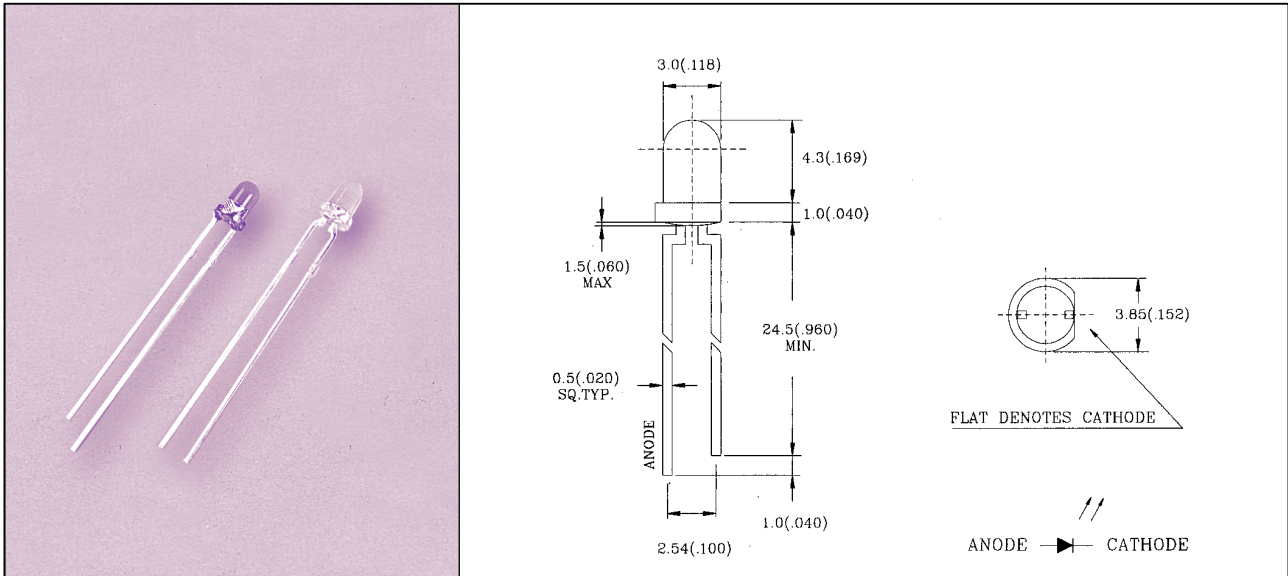
Part No.	I <sub>D</sub> (nA)			V <sub>(BR)R</sub> (V)			V <sub>OC</sub> (mV)			I <sub>L</sub> (uA)			t <sub>ON</sub> /t <sub>OFF</sub> (nS)			C <sub>T</sub> (pF)			λ (nm)			
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	PEAK	MAX	
L-SC1R9PD1C		5	30	33	170				390		30	40			45/45			18		400		1050
L-SC1R9PD1D1		5	30	33	170				390		30	40			45/45			18		900	940	
L-SC1R9PD1D2		5	30	33	170				390		30	40			45/45			18		800	870	
<b>TEST CONDITION</b>	V <sub>R</sub> =10V E <sub>e</sub> =0mW/cm <sup>2</sup>			I <sub>R</sub> =100uA E <sub>e</sub> =0mW/cm <sup>2</sup>			λ <sub>c</sub> =940nm E <sub>e</sub> =0.5mW/cm <sup>2</sup>			V <sub>R</sub> =5V E <sub>e</sub> =0.1mW/cm <sup>2</sup>			V <sub>R</sub> =10V R <sub>L</sub> =100Ω			f=1MHZ V <sub>R</sub> =5V E <sub>e</sub> =0mW/cm <sup>2</sup>						
<b>PARAMETER</b>	REVERSE DARK CURRENT			REVERSE BREAKDOWN VOLTAGE			OPEN CIRCUIT VOLTAGE			LIGHT CURRENT			TURN-ON TURN-OFF TIME			TOTAL CAPACITANCE			SPECTRAL SENSITIVITY WAVELENGTH			

D1,D2=BLACK

1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.

**L-31XXIR1XX 3.0mm INFRARED EMITTING DIODE**



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>R</sub> (V)	T <sub>opr</sub>	T <sub>stg</sub>
L-31XXIR1XX	100	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

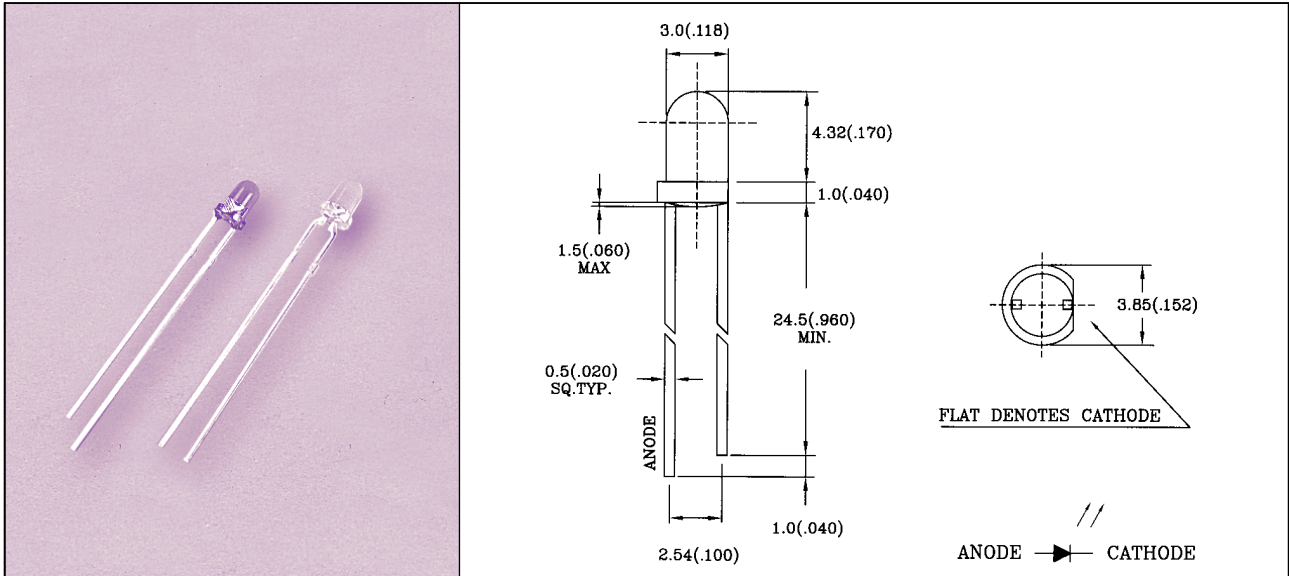
Part No.	V <sub>F</sub> (V)			I <sub>R</sub> (μA)			λ <sub>p</sub> (nm)			2 θ 1/2 (dgc)			I <sub>e</sub> (mw/sr)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX
L-314EIR1C		1.2 1.4	1.6			10		940			20		7	14	
L-315EIR1C		1.2 1.4	1.6			10		940			25		6	12	
L-316EIR1C		1.2 1.4	1.6			10		940			30		6	12	
L-314EIR1BC		1.2 1.4	1.6			10		940			20		5	10	
L-315EIR1BC		1.2 1.4	1.6			10		940			25		6	12	
L-316EIR1BC		1.2 1.4	1.6			10		940			30		6	12	
L-318EIR1BC		1.2 1.4	1.6			10		940			40		6	10	
<b>TEST CONDITION</b>	I <sub>F</sub> =20mA I <sub>F</sub> =100mA			V <sub>R</sub> =5V			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA		

BC=BLUE CLEAR

1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.

**L-32XXIRXX 3.0mm INFRARED EMITTING DIODE**



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>R</sub> (V)	Topr	Tstg
L-32XXIRXX	100	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

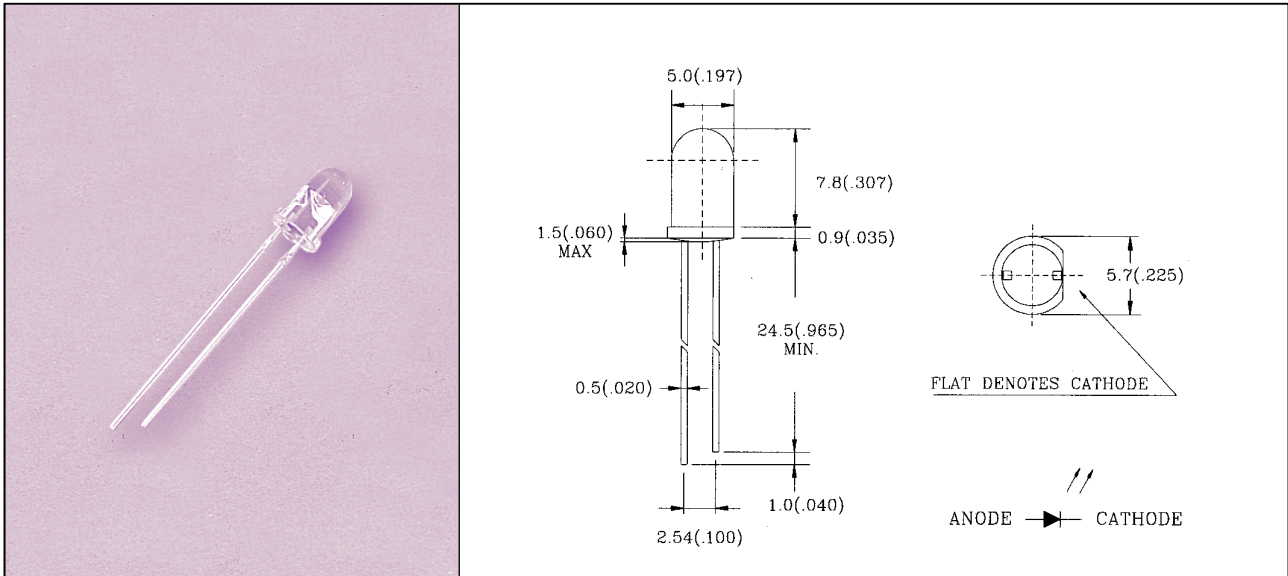
◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

Part No.	V <sub>F</sub> (V)			I <sub>R</sub> (μA)			λ <sub>p</sub> (nm)			2 θ 1/2 (dgr)			I <sub>e</sub> (mw/sr)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX
L-327EIR1C	-	1.2	1.6	-	-	10	-	940	-		35		7.5	15	-
L-327EIR1BC	-	1.2	1.6	-	-	10	-	940	-		35		7.5	15	-
L-32AEIR1C	-	1.2	1.6	-	-	10	-	940	-		50		6	10	-
<b>TEST CONDITION</b>	I <sub>F</sub> =20mA I <sub>F</sub> =100mA			V <sub>R</sub> =5V			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA		

BC=BLUE CLEAR

- 1.All dimension are in millimeters (inches).
- 2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.

**L-51XXIR1C 5.0mm INFRARED EMITTING DIODE**



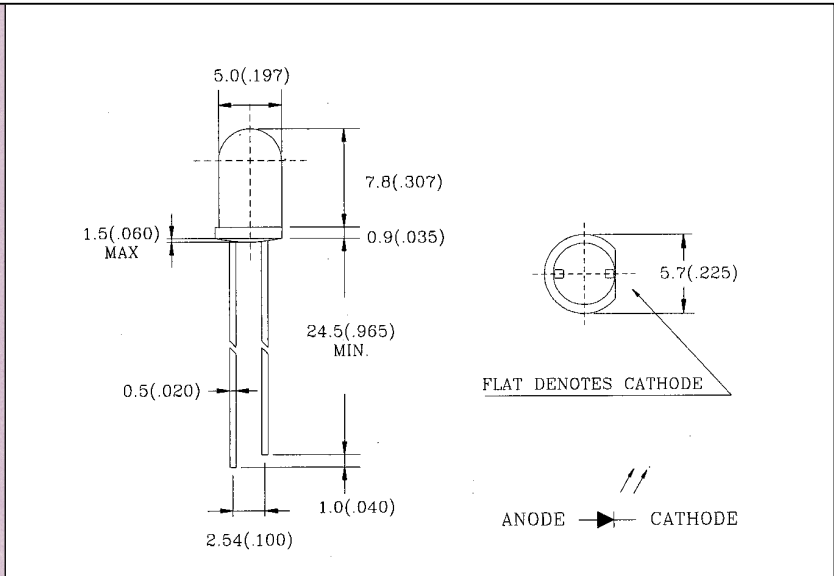
◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>R</sub> (V)	T <sub>opr</sub>	T <sub>stg</sub>
L-51XXIR1C	100	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

Part No.	V <sub>F</sub> (V)			I <sub>R</sub> (μA)			λ <sub>p</sub> (nm)			2 θ <sub>1/2</sub> (dgc)			I <sub>e</sub> (mw/sr)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX
L-514EIR1C		1.2 1.4	1.6			10		940			20		17	30	
L-515EIR1C		1.2 1.4	1.6			10		940			25		14	25	
L-516EIR1C		1.2 1.4	1.6			10		940			30		12	23	
L-517EIR1C		1.2 1.4	1.6			10		940			35		10	20	
L-518EIR1C		1.2 1.4	1.6			10		940			40		8	18	
L-51AEIR1C		1.2 1.4	1.6			10		940			50		6	12	
L-514CIR1C		1.3 1.6	1.8			10		940			20		13	25	
<b>TEST CONDITION</b>	I <sub>F</sub> =20mA I <sub>F</sub> =100mA			V <sub>R</sub> =5V			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA		

- 1.All dimension are in millimeters (inches).
- 2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.



◆ **ABSOLUTE MAXIMUM RATING:(Ta=25°C)**

Part No.	P <sub>D</sub> (mw)	V <sub>R</sub> (V)	Topr	Tstg
L-51XXIR1BC	100	5	-35°C to 85°C	-35°C to 85°C
<b>PARAMETER</b>	<b>Power Dissipation</b>	<b>Reverse Voltage</b>	<b>Operating Temperature Range</b>	<b>Storage Temperature Range</b>
<b>Lead Soldering Temperature {1.6mm(0.063 inch)From Body}250°C ±5°C For 3 Seconds</b>				

◆ **ELECTRO-OPTICAL CHARACTERISTICS:(Ta=25°C)**

Part No.	V <sub>F</sub> (V)			I <sub>R</sub> (μA)			λ <sub>p</sub> (nm)			2 θ1/2 (dgc)			I <sub>e</sub> (mw/sr)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX
L-514EIR1BC		1.2 1.4	1.6			10		940			20		17	30	
L-515EIR1BC		1.2 1.4	1.6			10		940			25		14	25	
L-516EIR1BC		1.2 1.4	1.6			10		940			30		12	23	
L-517EIR1BC		1.2 1.4	1.6			10		940			35		10	20	
L-518EIR1BC		1.2 1.4	1.6			10		940			40		8	18	
L-51AEIR1BC		1.2 1.4	1.6			10		940			50		6	12	
L-514CIR1BC		1.3 1.6	1.8			10		940			20		13	25	
<b>TEST CONDITION</b>	I <sub>F</sub> =20mA I <sub>F</sub> =100mA			V <sub>R</sub> =5V			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA			I <sub>F</sub> =20mA		

BC=BLUE CLEAR

1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.