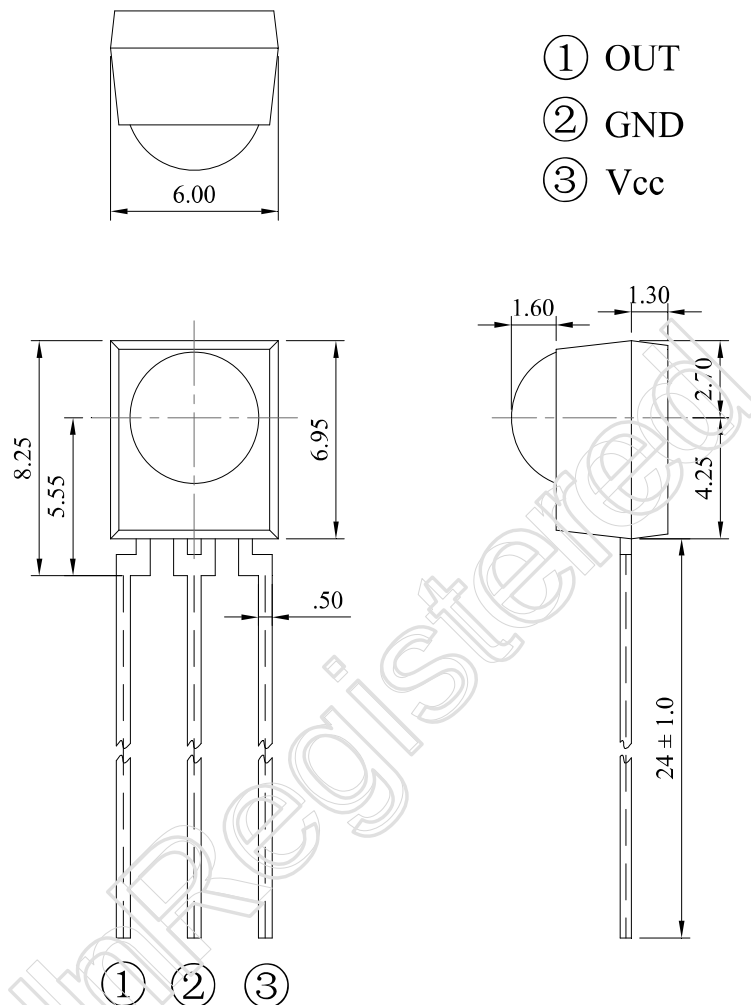




BOSMFC OPOELECTRONICS CO. LTD

Package Dimension:



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (.010") unless otherwise specified.
3. Specifications are subject to change without notice.



Absolute Maximum Ratings at Ta=25°C

Item	Symbol	Value	Unit
Supply Voltage	Vcc	0~6.00	V
Operating Temperature	Topr	-40°C to +85°C	
Storage Temperature	Tstg	-40°C to +100°C	
Soldering Temperature	Tsol	260°C for 5 Seconds	

Electrical Optical Characteristics at (Ta=25°C, Vcc=5V, f_o=38KHz)

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test condition	
Consumption Current	Icc	---	1.2	---	mA	No signal input	
B.P.F Center Frequency	Fo	---	38	---	KHz		
Peak Wavelength	λp	---	940	---	nm		
Reception Distance	L0	14	---	---	m	At the ray axis*1	
	L45	6	---	---			
Half Angle (Horizontal)	θh	---	45	---	deg		
Half Angle (Vertical)	θv	---	45	---			
High Level Pulse Width	TH	400	---	800	μs	VIN=50mVp-p	
Low Level Pulse Width	TL	400	---	800			
High Level Output Voltage	VH	4.50	---	---	V		
Low Level Output Voltage	VL	---	0.20	0.50			

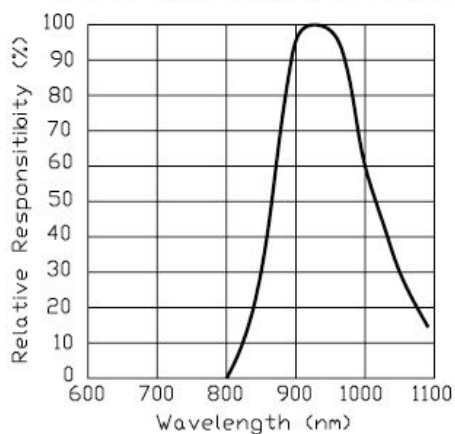
Notes:

1. The ray receiving surface at a vertex and relation to the ray axis in the range of $\theta=0^\circ$ and $\theta=45^\circ$.
2. A range from 30cm to the arrival distance. Average value of 50 pulses.

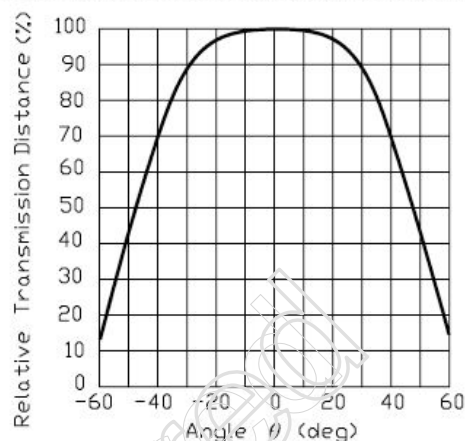


Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

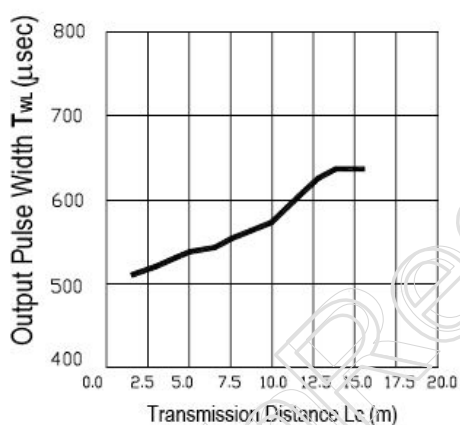
Relative Spectral Sensitivity vs. Wavelength



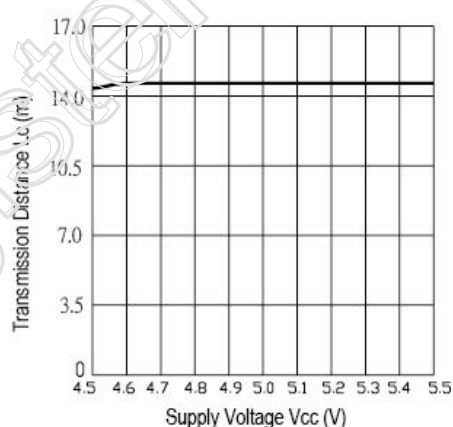
Relative Transmission Distance vs. Direction



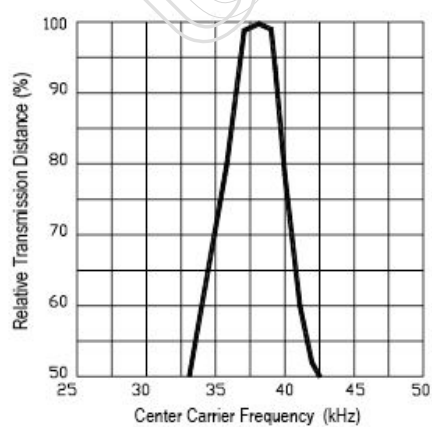
Output Pulse Length vs. Arrival Distance



Arrival Distance vs. Supply Voltage



Relative Transmission Distance vs. Center Carrier Frequency



Arrival Distance vs. Ambient Temperature

