



# 5.0 x 4.1mm Oval Infrared 55/30° 850nm Water Clear

Order code: **58-0116**

MPN: OSI3NA5451B

## Features:

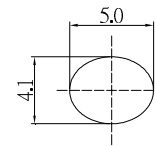
- High Radiant Power LEDs
- 5.0x4.1mm Standard Directivity
- Superior Weather-resistance
- UV Resistant Epoxy
- Water Clear Type

## Applications

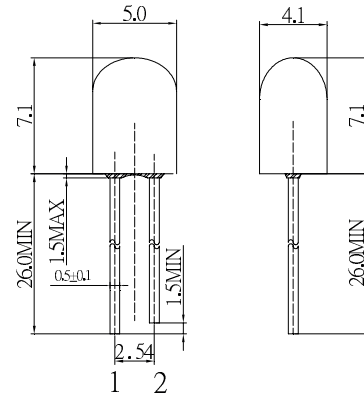
- IrDA
- Encoder
- Data communication
- IR camera



## Outline dimensions:



1. Anode  
2. Cathode  
Unit:mm  
Tolerance:±0.3mm



## Absolute maximum rating (Ta=25°C)

Item	Symbol	Value	Unit
DC forward current	$I_F$	100	mA
Pulse forward current*	$I_{FP}$	1000	mA
Reverse voltage	$V_R$	5	V
Power dissipation	$P_D$	180	mW
Operating temperature	$T_{opr}$	-30 to +85	°C
Storage temperature	$T_{stg}$	-40 to +100	°C
Lead soldering temperature	$T_{sol}$	260°C/5sec	-

\*Pulse width max. 10ms. Duty ratio max. 1/10

## Electrical - Optical characteristics (Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC forward voltage	$V_F$	$I_F = 100\text{mA}$	-	1.6	1.8	V
DC reverse current	$I_R$	$V_R = 5\text{V}$	-	-	10	μA
Peak wavelength	$\lambda_p$	$I_F = 100\text{mA}$	-	850	-	nm
Radiant intensity	$I_e$	$I_F = 100\text{mA}$	-	25	-	mW/Sr
50% Power angle	$2\theta_{1/2}$	$I_F = 100\text{mA}$	-	55/30	-	deg

\* Tolerance of peak wavelength is ±1nm  
† Tolerance of luminous intensity is ±15%

## Directivity:

