

# IN-F45IR

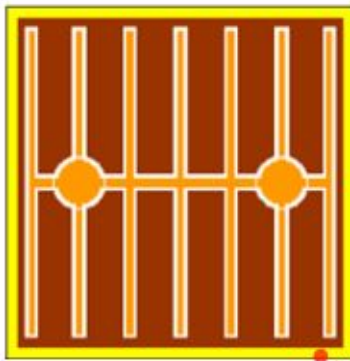
## Great Performances:

- Larger Emitting Area
- 100% Tested & Sorted
- Conductive Si-substrate
- Outdoor Applications
- Rough Surface

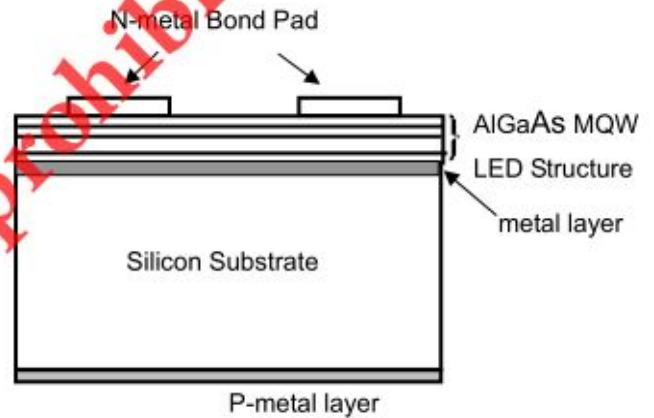
## Descriptions:

F45IR is a Infra-red LED chip made from MOCVD process and bonded with Silicon. It is fabricated by the proprietary metal Bonding mechanism, F45IR is featured by homogeneous and high light output at top side with superior beam pattern. Excellent performance under sunlight and reliable life-long stability make F45IR ideal for IrDA, Encoder, data communication applications.

## 2. Chip Diagram:



Chip pattern



Chip Side view

## 3. Chip characteristics.

### Chip Dimension

1. Chip size:  $1150 \pm 25\mu\text{m} \times 1150 \pm 25\mu\text{m}$
2. Chip thickness:  $180 \pm 15\mu\text{m}$
3. N-bonding pad: Au pad  $\phi 120 \pm 15\mu\text{m}$

Parameter	Condition	Symbol	Min	Typ.	Max.	Unit
Forward voltage	I F =350mA	V F1	1.3	1.6	1.9	V
Forward voltage	I F =10uA	V F3	1.1	---	1.3	V
Threshold voltage	V R =5V	I R	---	---	10	V
Peak wavelength	I F =350mA	$\lambda p$	840	---	860	nm
Half width	I F =350mA	$\Delta\lambda$	---	30	---	nm
Radiant Power	I F =350mA	Po	150	---	---	mw