

## SPECIFICATION OF LED CHIP CN870-55 [INFRARED]

1) Commodity Type and Physical Characteristics.

- |                      |                     |                             |
|----------------------|---------------------|-----------------------------|
| 1. Material          | GaAlAs/GaAlAs (DDH) |                             |
| 2. Electrode         | Top Side            | P (anode) side : Au Alloy   |
|                      | Bottom Side         | N (cathode) side : Au Alloy |
| 3. Electrode Pattern | 120um dia.          |                             |
| 4. Chip Size         | 550um*550um         |                             |
| 5. Chip Thickness    | 150um±30um          |                             |

2) Electro-Optical Characteristics

Parameters	Symbol	Condition	min.	typ.	max.	unit
Forward Voltage	Vf	If=50mA		1.40	1.45	V
		If=100mA		1.48	1.50	
		If=1A*		2.4	3.0	
		If=2A*		3.3	4.0	
Reverse Current	Ir	Vr=5V			10	uA
Total Radiated Power	Po	If=50mA		10		mW
		If=100mA		20		
		If=1A*		200		
		If=2A*		400		
Peak Wavelength	$\lambda_P$	If=50mA		870		nm
Spectral Radiation Bandwidth	$\Delta\lambda$	If=50mA		40		nm
RiseTime	tr	If=50mA		15		ns
FallTime	tf	If=50mA		10		ns

\* Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡ Die shall be mounted on TO-18 gold header without resin coated. (Ta=25°C)

