

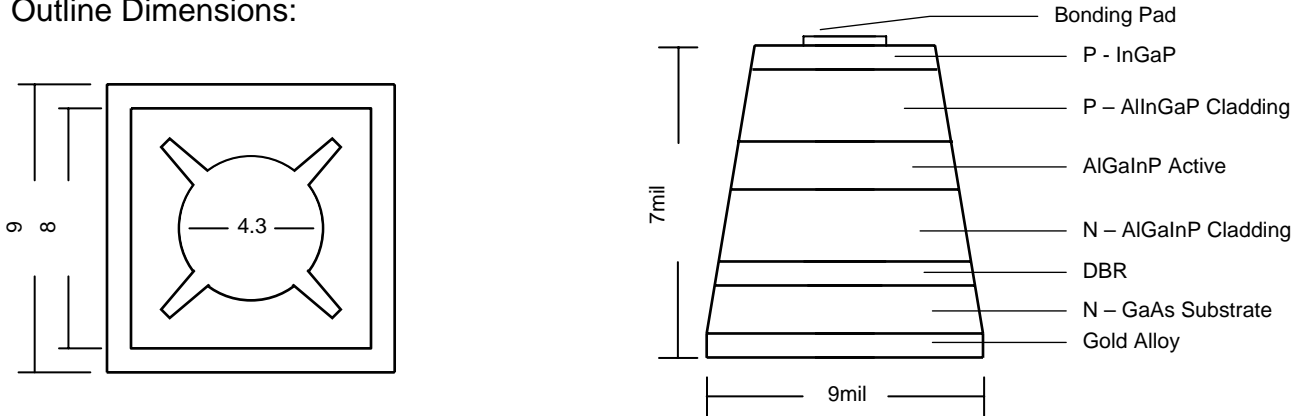
# TCU09UOR



- ❖ Features:
  - AllnGaP/GaAs LED Chips
  - MOVPE Process Wafer
  - MQW and DBR
  - Roughen Surface

- ❖ Typical Applications
  - Indoor/Outdoor Applications

## ❖ Outline Dimensions:



## ❖ Physical Structure:

Chip dimensions		Chip size	9 mil x 9 mil	229 $\mu\text{m}$ x 229 $\mu\text{m}$
		Thickness	7 mil	178 $\mu\text{m}$
		Emission area	8 mil	203 $\mu\text{m}$
		Bonding pad	4.3 mil	109 $\mu\text{m}$
Electrode	Top	P (anode)	Gold alloy	
	Backside	N (cathode)	Gold alloy	

## ❖ Electro-Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$		2.10	2.40	V
Wavelength	$\lambda_D$	$I_F = 20\text{mA}$	617	622	627	
Spectral width at half height	$\Delta\lambda$	$I_F = 20\text{mA}$	-	17	-	nm
Reverse Voltage	$V_R$	$I_R = 10\mu\text{A}$	5	-	-	V
Luminous Intensity	$I_v$	B1	30	-	-	mcd
		C1	40	-	-	
		D	50	-	-	