

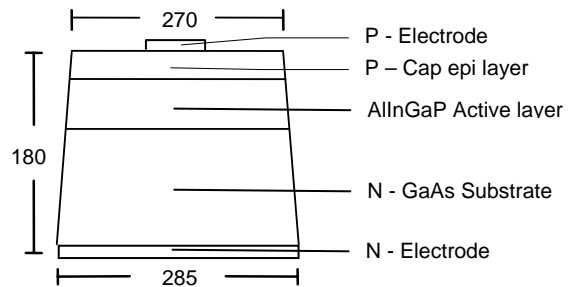
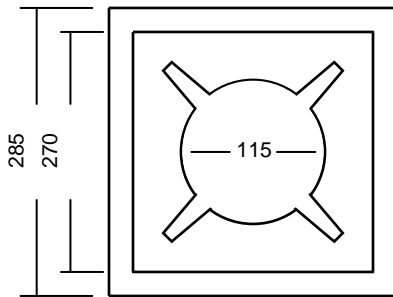
# TCO12URU-S



- ❖ Features:
  - AllnGap/GaAs
  - MOVPE Process Wafer
  - Suitable for new creative products

- ❖ Typical Applications
  - Automotive Signal Lamps: Stop/Tail Lights
  - Automotive Interior Lighting
  - Commercials

## ❖ Outline Dimensions:



## ❖ Physical Structure:

Chip dimensions		Chip size	11 mil x 11 mil	285 $\mu\text{m}$ x 285 $\mu\text{m}$
		Thickness	7.1 mil	180 $\mu\text{m}$
		Emission area	11 mil	270 $\mu\text{m}$
		Bonding pad	4.5 mil	115 $\mu\text{m}$
Electrode	Top	P (anode)	Gold (Aluminium optional)	
	Backside	N (cathode)	Gold alloy	
Surface condition		Not frosted		

## ❖ Electro-Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	-	1.90	2.40	V
Wavelength	$\lambda_P$	$I_F = 20\text{mA}$	-	652	-	nm
	Hue	$I_F = 20\text{mA}$	632	637	642	
Spectral width at half height	$\Delta\lambda$	$I_F = 20\text{mA}$	-	20	-	nm
Reverse Voltage	$V_R$	$I_R = 10\mu\text{A}$	5	-	-	V
Luminous Intensity	$I_v$	D1	45	-	-	mcd
		E1	55	-	-	
		F1	65	-	-	

RED

## ❖ Note. Also available:

Chip size		Luminous intensity
mils	$\mu\text{m}$	mcd
9	210 x 210	40
9	210 x 210	50
8	185 x 185	40