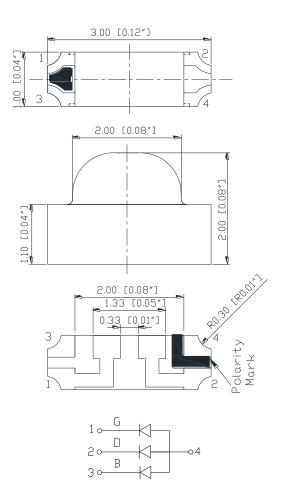


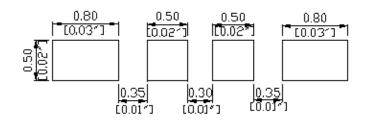
## **SPECIFICATION**

# CSRT125R2GT2B2C-2

### **PACKAGE OUTLINES**



### **RECOMMENDED PAD LAYOUT**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25mm (0.01") unless otherwised noted.
- 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle	
CSRT125R2GT2B2C-2	InGaAlP	Red	Water Clear	150°	
	InGaN	True Green	Water Clear	150°	
	InGaN	Blue	Water Clear	150°	





## **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

		Max Rating			
Parameter	Symbol	Blue/ Green	Red	Unit	
Forward Current	lF	30	30	mA	
Reverse Voltage	VR	5 5		V	
Power Dissipation	Pd	111	75	mW	
Operating Temperature Range	Тор	-40~+80		°C	
Storage Temperature Range	Тѕтс	-40~+85		°C	
Peak Pulsing Current (tp $\leq$ 10 $\mu$ S, duty cycle = 0.005)	lFP	125	125	mA	

## **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Doromotor	Symbol	Test Condition	Color	Value			I Imit
Parameter				Min	Тур	Max	Unit
Luminous Intensity	lv	IF = 20mA	Red	80	190	-	mcd
			Green	320	530	-	
			Blue	60	100	-	
Forward Voltage	VF	IF = 20mA	Red	ı	2.0	2.5	V
			Green	ı	3.1	3.7	
			Blue	-	3.1	3.7	
Viewing Angle at 50% lv	201/2	IF = 20mA	-	-	150	-	Deg
Dominant Wavelength	λD	IF = 20mA	Red	-	625	-	nm
			Green	-	525	-	
			Blue	-	470	-	

<sup>\*</sup>Tolerance of viewing angle: -10 / +5 deg.

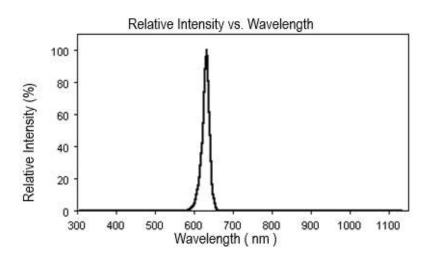


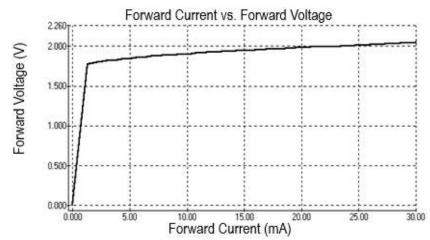
<sup>\*</sup>Tolerance of forward voltage is -/+ 0.05V

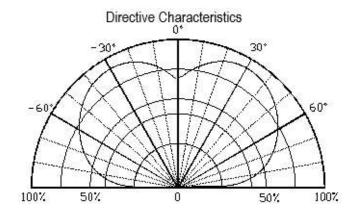
<sup>\*</sup>Tolerance of luminous intensity -/+ 1nm



# TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES (RED)





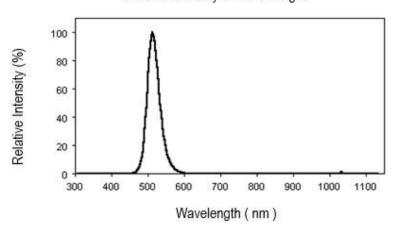




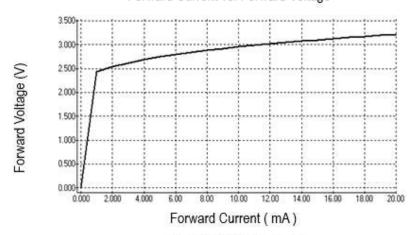


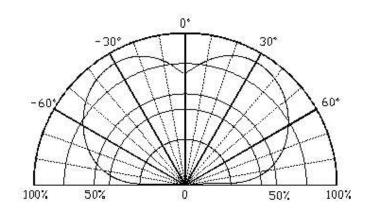
## TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES (GREEN)

#### Relative Intensity vs. Wavelength



#### Forward Current vs. Forward Voltage



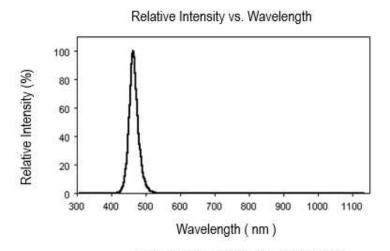


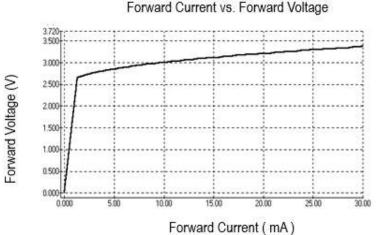
Directive Characteristics





# TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES (BLUE)





-60° 100% 50% 0 50% 100%

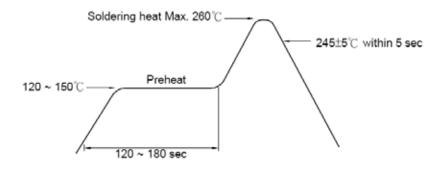
Directive Characteristics



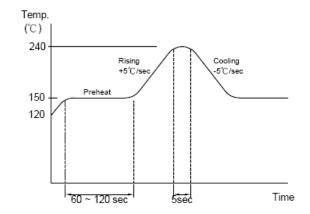


## **SOLDERING CONDITIONS**

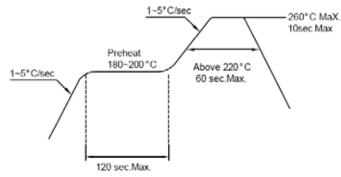
- 1. Hand Solder
  Basic spec is ≤ 280°C 3 sec one time only.
- 2. Wave Solder



#### 3-1. LEAD Reflow Solder



#### 3-2. PB-Free Reflow Solder

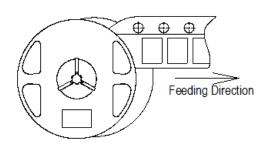


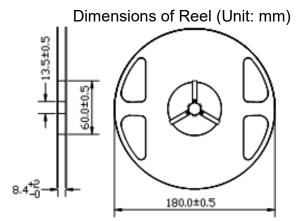
RoHS Compliant



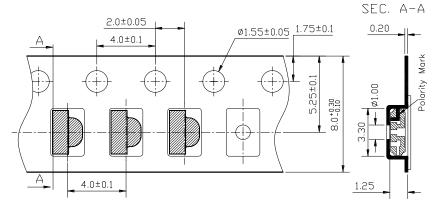
### **REEL PACKAGING**

### **Feeding Direction**

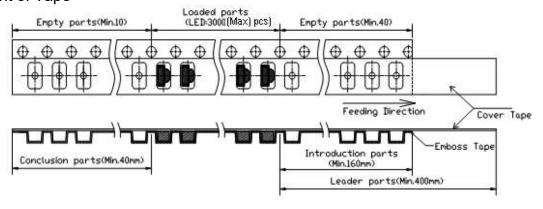




#### Dimensions of Tape (Unit: mm)



### Arrangement of Tape



#### Notes:

- 1. Empty component pockets are sealed with top cover tape.
- 2. The maximum number of missing lamp is two.
- 3. The polarity mark is oriented towards the tape sprocket hole;
- 4. 3,000 (Max) pcs/Reel

