

**MC-SP190SR**  
Conventional type

**Features**

- Apply For LCD Display, Indicators, Illuminations, etc.
- Compatible With Automatic Placement Equipment
- Compatible With Reflow Solder Process

**Maximum Ratings**

- Operating Temperature: -30°C to +80°C
- Storage Temperature: -40°C to +85°C
- Reverse Voltage: 5.0V
- MC-SP190SR: 69 mWatt DC Power Dissipation
- Forward Current: 30 mA
- Peak Forward Current: 100\*\*mA(IF)

\*\* Pulse test: Pulse width  $\leq 0.1$ msec, Duty cycle  $\leq 10\%$

Figure 1  
Forward Current VS. Forward Voltage

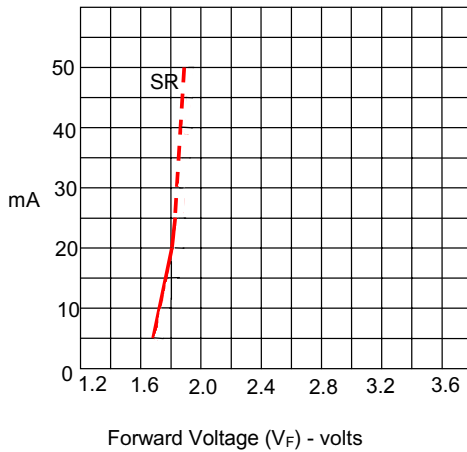
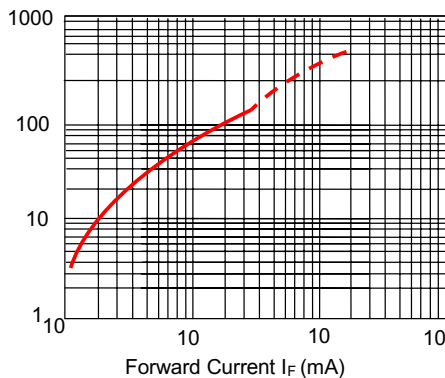
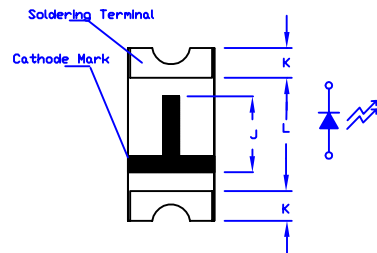
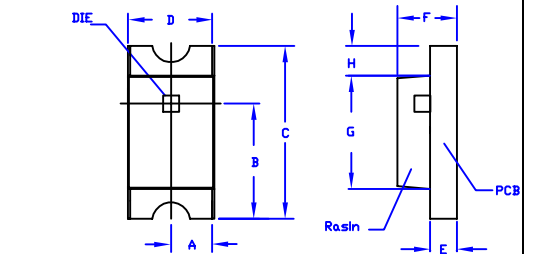


Figure 2  
Luminous Intensity VS. Forward Current

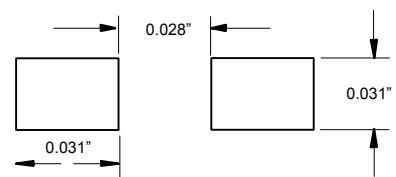


**Single Color Surface Mounted Chip LED**  
Size :0603



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.012	0.020	0.3	0.5	
B	0.037	0.045	0.95	1.15	
C	0.059	0.067	1.5	1.7	
D	0.028	0.035	0.7	0.9	
E	0.008	0.016	0.2	0.4	
F	0.028	0.035	0.7	0.9	
G	0.043	0.051	1.1	1.3	
H	0.004	0.012	0.1	0.3	
J	0.020	0.028	0.5	0.7	
K	0.008	0.016	0.2	0.4	
L	0.035	0.043	0.9	1.1	

**SU ESTED SOLDER PAD LAYOUT**



# MC-SP190SR



## ELECTRICAL CHARACTERISTICS @25°C, 20mA FORWARD CURRENT

MCC PART NUMBER	LIGHTIN COLOR	MATERIAL	VF(V)		λ(nm)		VIEW ANGLE	Iv*(mcd) TYP
			TYPE	MAX	λ p	λ D		
MC-SP190SR	Super Red	AlGaAs	1.85	2.3	660	643	130°	13

Figure 3  
Forward Current Derating Curve

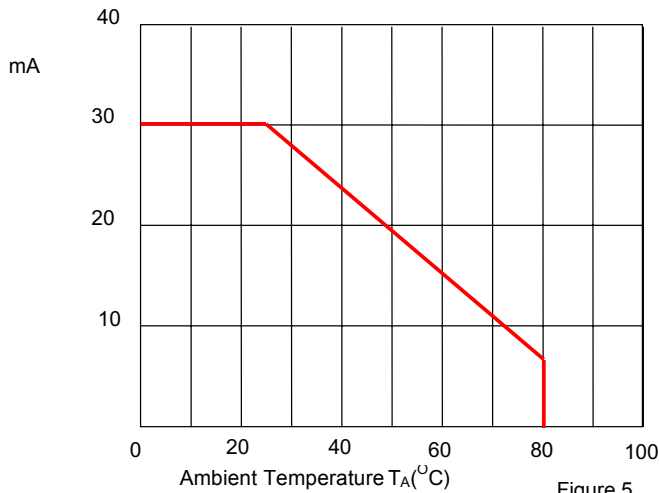


Figure 4  
Radiation Diagram

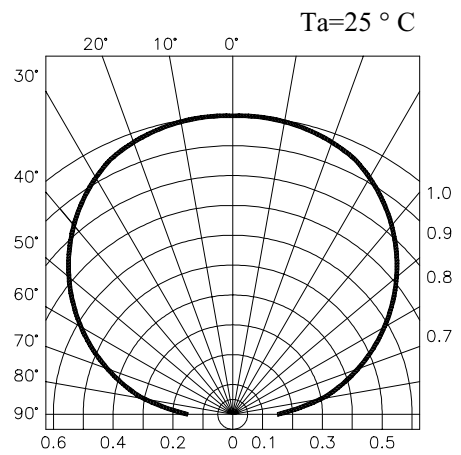
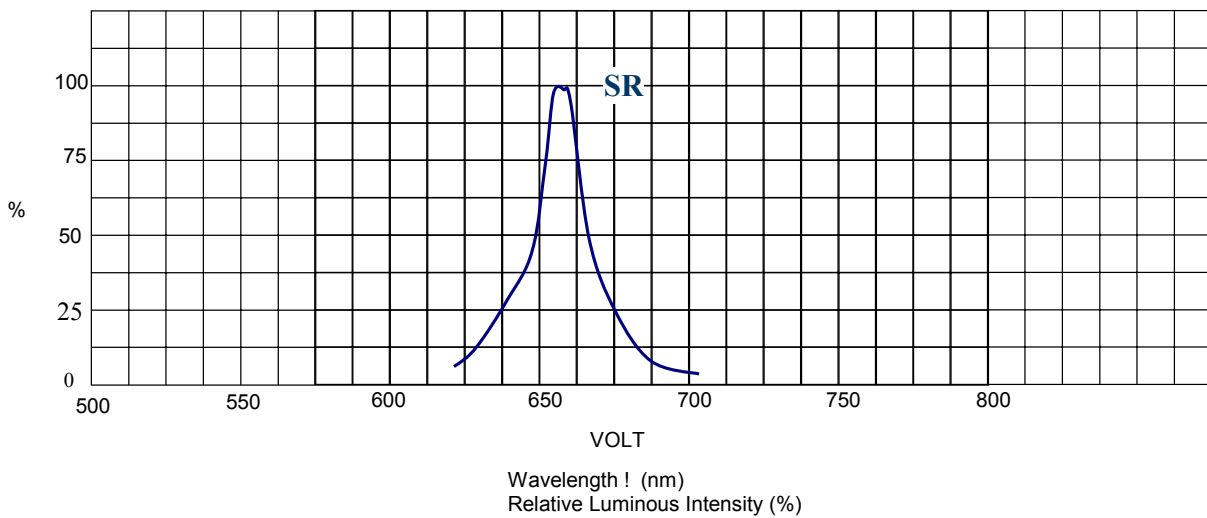
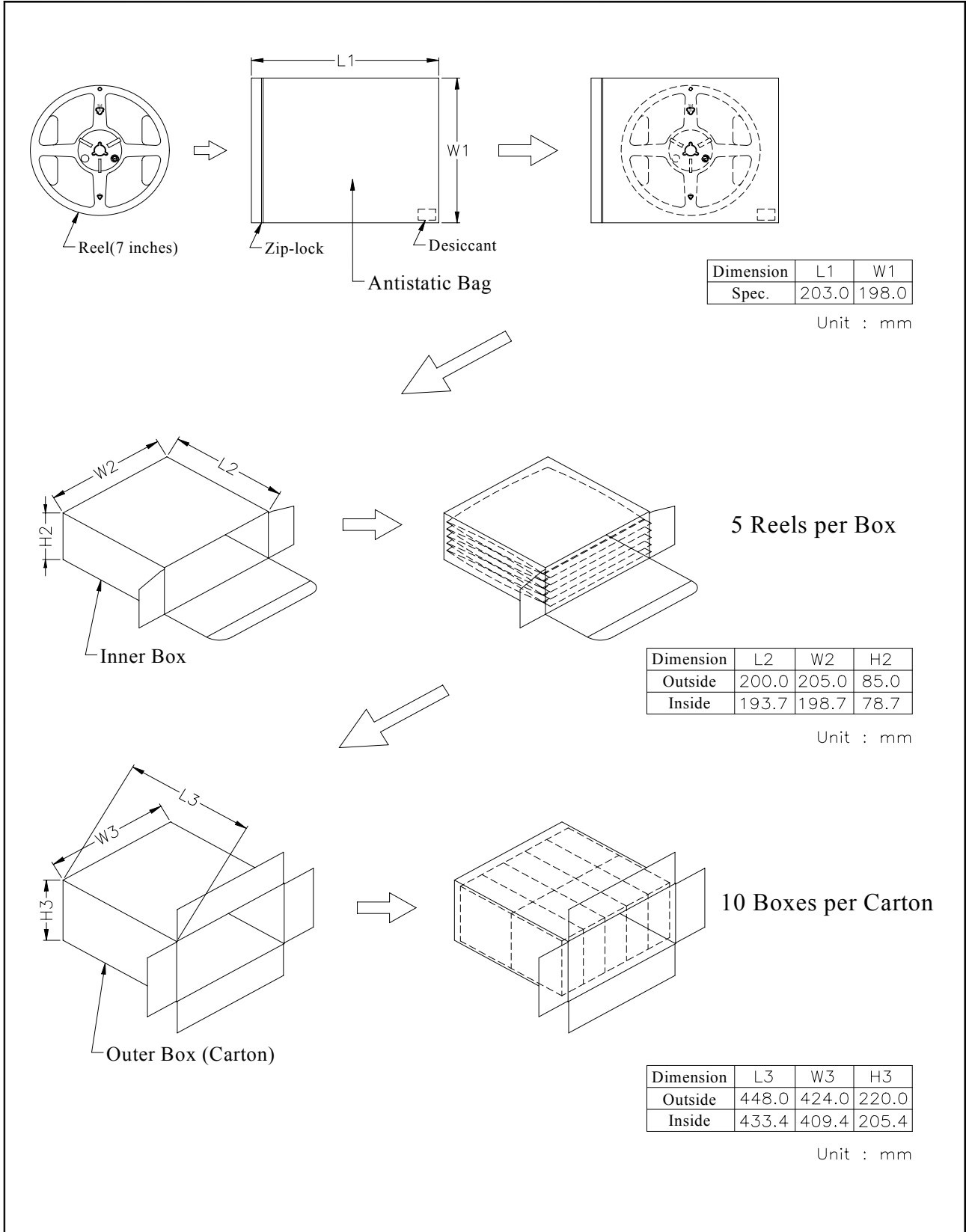


Figure 5  
Spectrum Distribution



## ◆ Packing and Shipping Spec.



# MC-SP190SR



Tape Specification: 4000pcs Per Reel

Packing Size												
Item	M	G	L	N	H	R	J	K	P	F	A	B
Spec.	8.00	4.00	1.75	3.50	1.50	1.00	4.00	2.00	0.95	1.80	0.87	0.23
Tolerance	±0.20	±0.10	±0.10	±0.05	+ 0.10 - 0.00	±0.10	±0.05	±0.05	±0.10	±0.10	±0.10	±0.05

