



EP20XX-350IRX

Ver1.2

Enhanced Power IR LED Revolutionary Light Source Module

FEATURES

Conventional LED design : Simple to use

High power and Low Cost : More competitive advantages in the LED industry

Special body frame: Excellent transiting heat from LED chip operating under 350mA.

ADVANTAGES

Operating Current : 350mA .

Custom Design Light Sourcing Module for 0.5W/0.55W

Excellent Heat Dissipation.



TYPICAL APPLICATIONS

Free air transmission system/optoelectronic switch

Charge Coupled Device/Infrared applied system/smoke detector

Light source for remote control devices

ABSOLUTE MAXIMUM RATINGS Tj = 25°C

Parameter	EP20XX-350IRX	Units
DC Forward Current	350	mA
Pulsed Forward Current	1000	mA
Power Dissipation	500/550	mW
Dark Current (VR=5V)	100	uA
Operating Temperature Range	-40 to 100	°C
Storage Temperature Range	-40 to 100	°C
Soldering Temperature	235	°C
Thermal Resistance Rθ(°C/W)	85	°C/W
LED Junction Temperature	110	°C

Operating conditions:

1.IR1/IR4 Pluse width =0.1msec,duty cycle= 1 % .

2.500mw(IR1) . 6 pins of E-Power LED required soldering on PCB.

550mw(IR4) . (PCB : 25.4 mm * 25.4 mm 1.6 t / two layers / 2.0 oz .)

3.Convective IR Reflow Soldering



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ELECTRICAL CHARACTERISTICS

Tj=25°C If=350mA

Device Type	Forward Voltage V _F (Volts)			Dark Current V _R =5V I _R =(uA)	Radiant Intensity I _e (mW/sr)		Radiant Power Φ _e (mW)	Peak Wavelength λ _P (nm)	Δλ _{1/2} (nm)	Viewing Angle 2θ1/2 (Degrees)
	Unit	Min.	Typ.	Max	Min.	Typ.	Typ	Typ.	Typ.	Typ.
EP2012-350IR1					240	340				10°
EP2012-350IR1-T					240	340				10°
EP2034-350IR1					215	285				20°
EP2016-350IR1	-	1.6	1.8	10	160	210	60	940	50	30°
EP2036-350IR1					155	205				30°
EP2036-350IR1-D					150	200				30°
EP201C-350IR1					45	60				60°
EP204K-350IR1					30	40				100°
EP2012-350IR4					720	850				10°
EP2012-350IR4-T					720	850				10°
EP2034-350IR4					410	510				20°
EP2016-350IR4	-	1.7	2.0	10	300	360	100	850	50	30°
EP2036-350IR4					290	350				30°
EP2036-350IR4-D					285	345				30°
EP201C-350IR4					90	110				60°
EP204K-350IR4					85	100				100°

This specification is subject to change without notice.



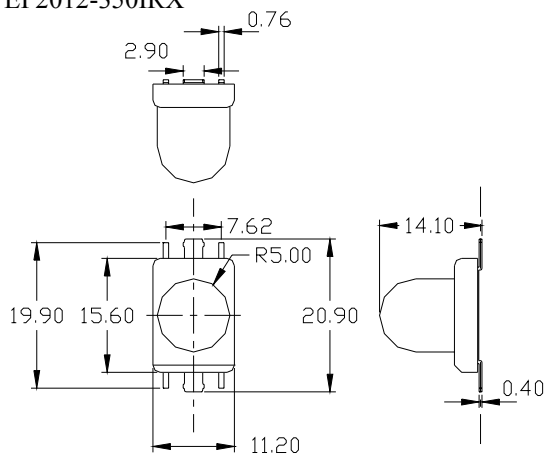
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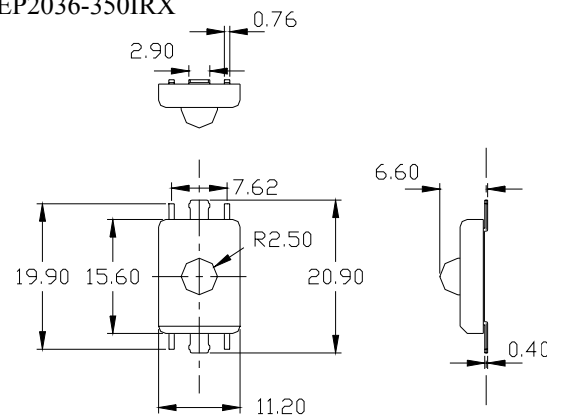
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OUTLINE DRAWINGS

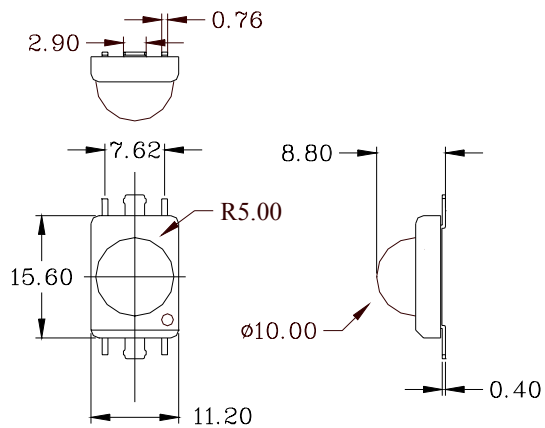
EP2012-350IRX



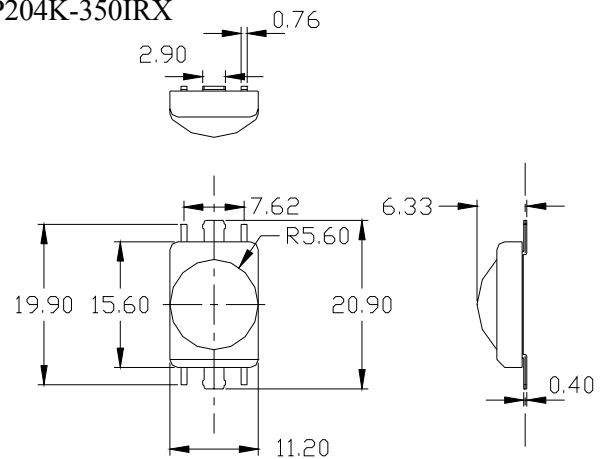
EP2036-350IRX



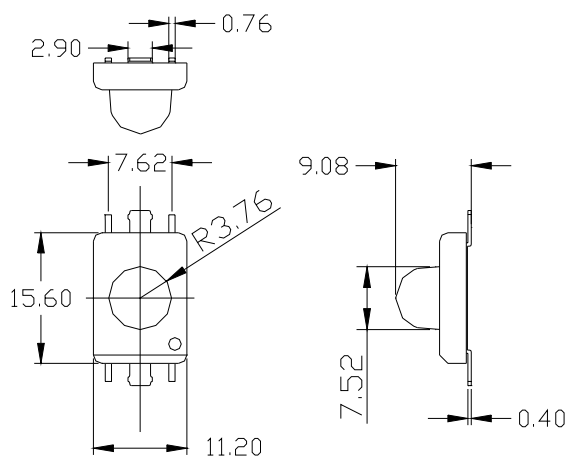
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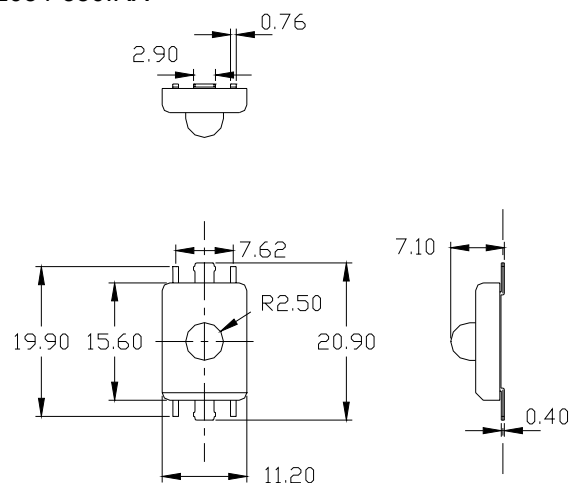
EP204K-350IRX



EP2016-350IRX



EP2034-350IRX





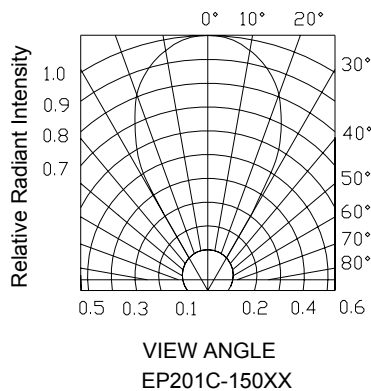
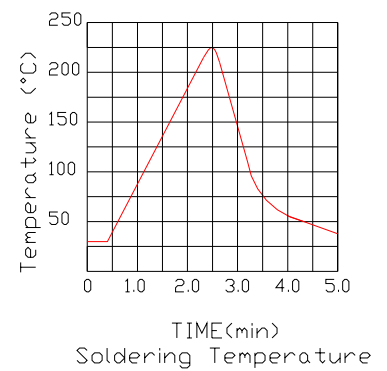
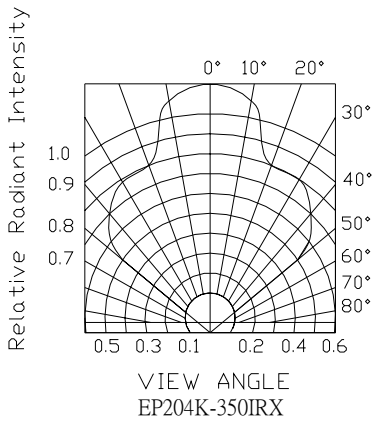
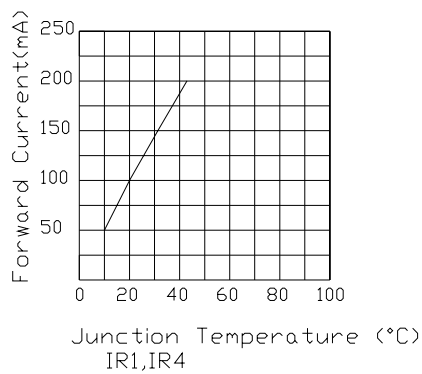
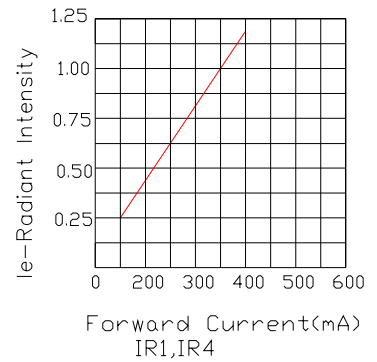
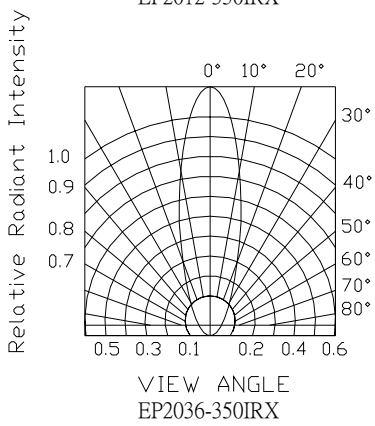
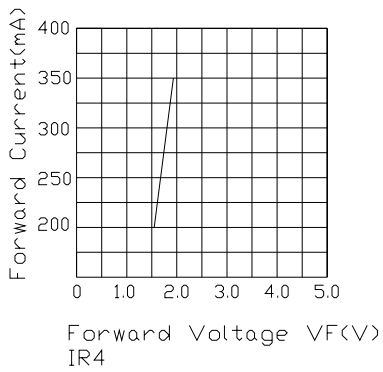
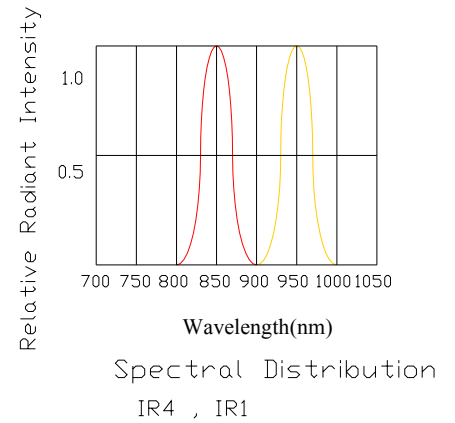
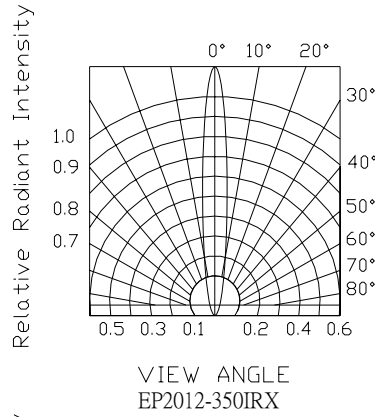
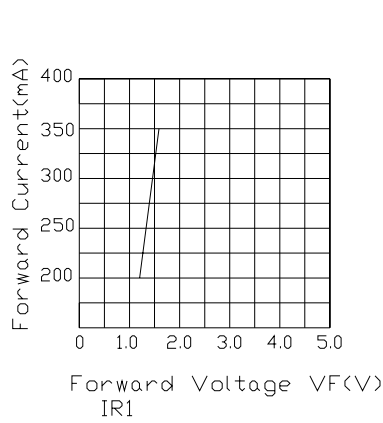
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CHARACTERISTICS CURVE

Ta=25°C



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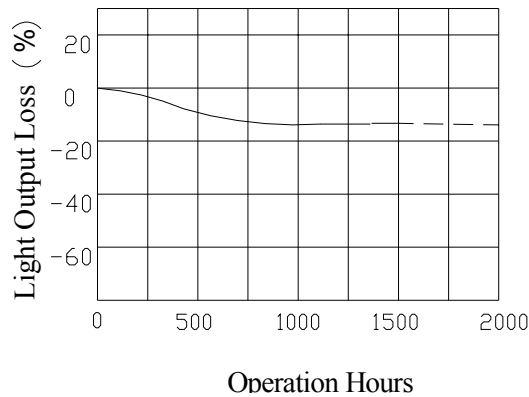


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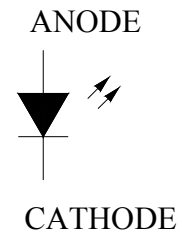
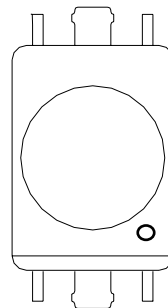
Operation Life



PIN CONNECTION

COLOR	IR1	IR4
ANODE	6	6
CATHODE	2	2
	5	5

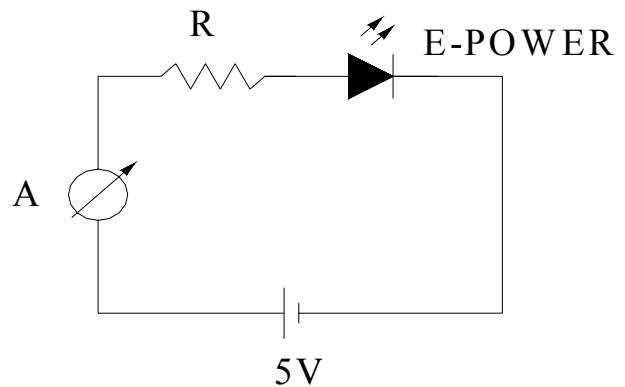
6 5 4



1 2 3

TEST CIRCUIT

COLOR	Vf (min)	R(350mA)
IR1	1.2V	10.9
IR4	1.4V	10.3



PART NO. SYSTEM OF E-Power LED

EP 2 01 2-350 IR1

1---2-3--4---5---6

1.E -Power LED

2.YEAR 2002


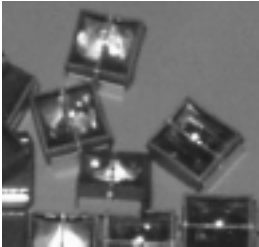

3.PACKAGE TYPE:01=10mm LENS;03=5mm LENS;04=11 mm LENS

4.VIEWING ANGLE:2*5=10°

5.CURRENT:350mA

6. λ p: IR1=940nm;IR4=850nm

Reflector Infrared LED

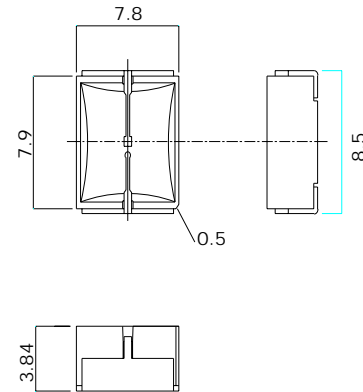
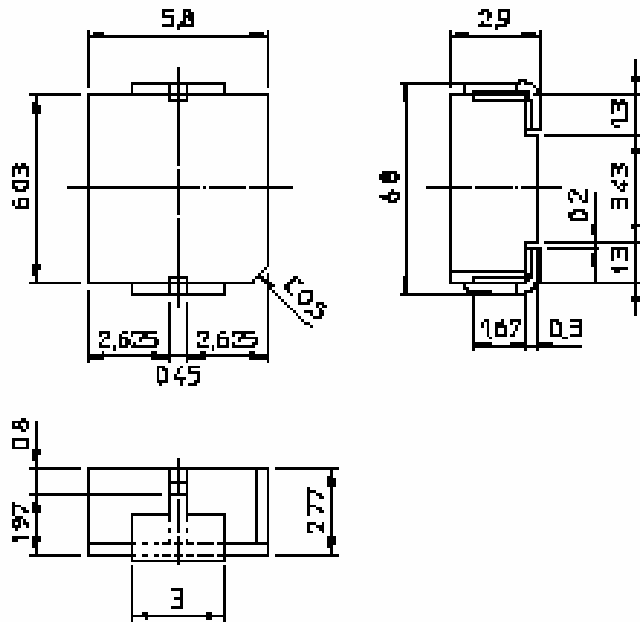
Item	6-6-3					8-8-4A		8-8-4C	
Wavelength (nm)	940	870	850	875	785	850		870	
Intensity (mW/sr)	160	180	180	400 (100 mA)	220	700	120	1,400 (350 mA)	2,300 (650 mA)
Angle(°)	± 7		± 7.5	± 8.5	± 7	± 4	± 25	± 14	
Photo									

Angle: (1/2)

Reflector LED Dimension

6-6-3

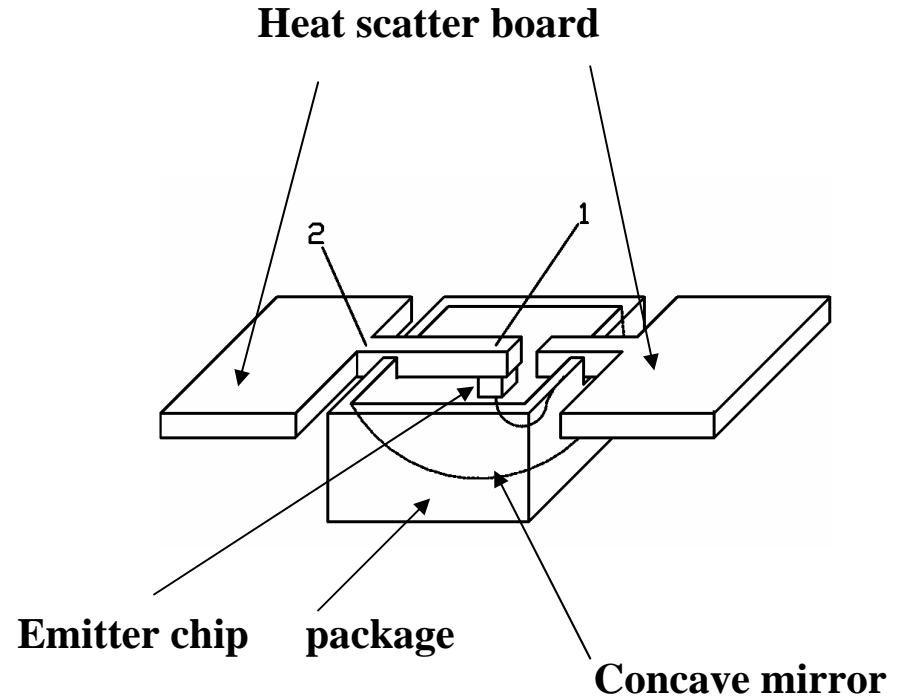
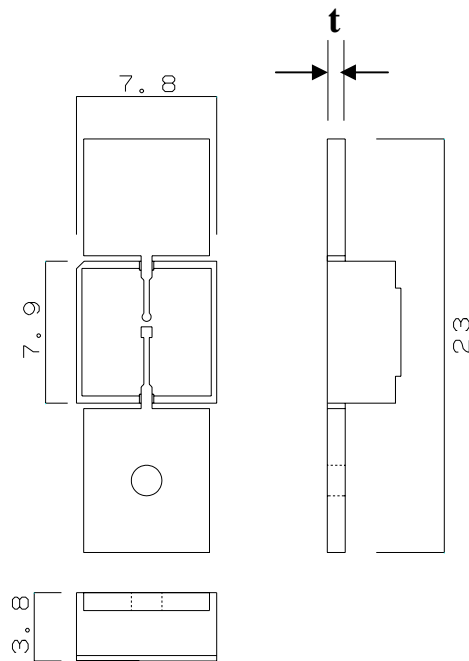
8-8-4A



Outline Tolerance $\pm 0.3\text{mm}$

Reflector LED Dimension

(8-8-4B, 8-8-4C)



8-8-4B----- $t = 1.2\text{mm}$

8-8-4C----- $t = 0.9\text{mm}$