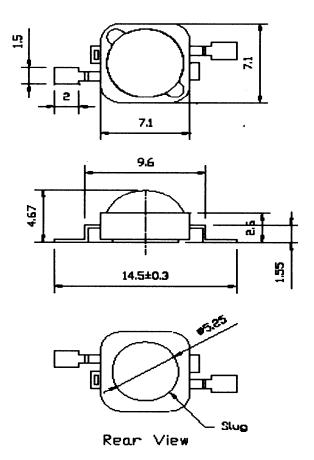






## **Technical Data Sheet – 1W High Power White LED**

## **★** Package Dimensions



#### NOTE:

- 1.All dimensions are in millimeter.
- 2.All dimensions are without tolerance are for reference only. .

### **★**Selection Guide

	Chip			Viewing
Part NO.	Matarial	Emitted	Lens	Angle2 $\Theta$
	Material	Color	Color	1/2(deg)
HP-350W-PW-1EN		Pure White	Water	100
HP-350W-WW-1EN	GaN	Warm white	clear	130







### Part No:HP-350W-PW-1EN

## **★**Absolute Maximum Ratings

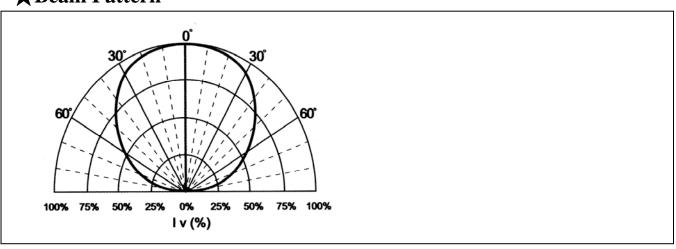
(Ta=25°℃)

Parameter	Symbol	MAX. Rating	Unit
Reverse Current (VR=5V)	IR	10	uA
DC Forward Current	IF	350	mA
Peak Forward current	Ipeak	500	mA
LED Junction Temperature	TJ	120	$^{\circ}\!\mathbb{C}$
Operating Temperature	Topr	-40~+85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tsto	-40~+100	${\mathbb C}$

Soldering Temperature MAX. 260°C for 5 sec MAX.

## **★**Electric-Optical Characteristics

Parameter	Symbol	<b>Test Condition</b>	MIN	TYP	MAX	Unit
Forward Voltage	VF	IF=350mA		3.3	3.8	V
Reverse Voltage	VR	IR=10uA	5			V
Luminous Flux	IV	IF=350mA	50	90		lm
Color temperature	CCT	IF=350mA		6500	10000	K









### Part No:HP-350W-WW-1EN

## **★**Absolute Maximum Ratings

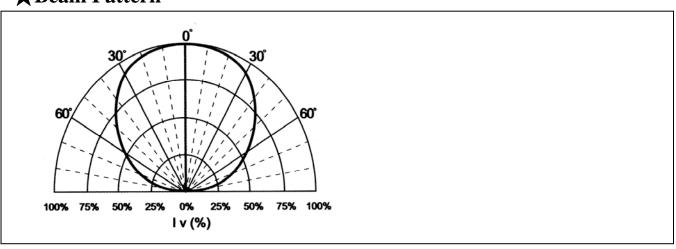
(Ta=25°C)

Parameter	Symbol	MAX. Rating	Unit
Reverse Current (VR=5V)	IR	10	uA
DC Forward Current	IF	350	mA
Peak Forward current	Ipeak	500	mA
LED Junction Temperature	TJ	120	$^{\circ}\!\mathbb{C}$
Operating Temperature	Topr	-40~+85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tsto	-40~+100	${\mathbb C}$

Soldering Temperature MAX. 260°C for 5 sec MAX.

## **★**Electric-Optical Characteristics

Parameter	Symbol	<b>Test Condition</b>	MIN	TYP	MAX	Unit
Forward Voltage	VF	IF=350mA		3.3	3.8	V
Reverse Voltage	VR	IR=10uA	5			V
Luminous Flux	IV	IF=350mA	50	75		lm
Color temperature	CCT	IF=350mA		3300	3800	K





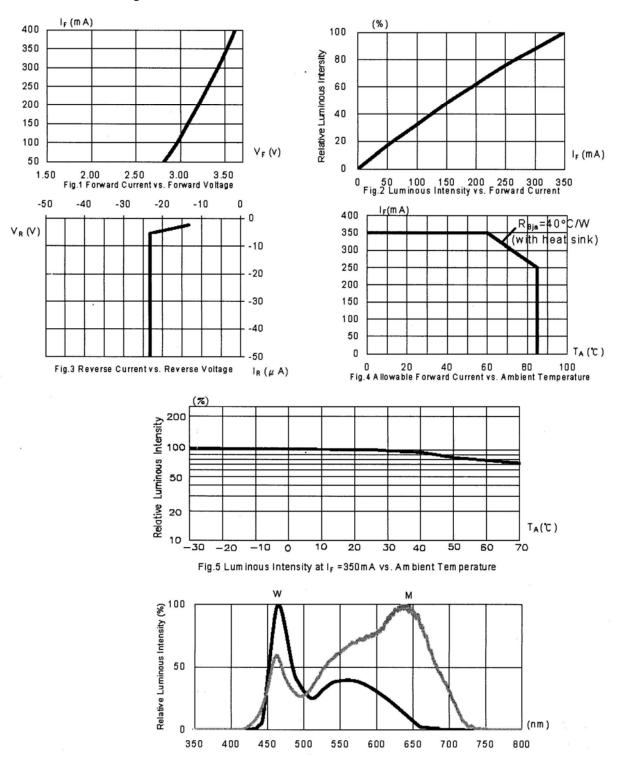




### Part No:HP-350W-xW-1EN

### **★** Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)









## Part No:HP-350W-xW-1EN

## **★**Reliability Test

No	Item	<b>Test Condition</b>	Test Hours/Cycles	Samples Tested	Acc./Rej
1	Room Temperature DC Oper-ating Life	$Ta=25^{\circ}C$ , $I_{F=}350 \text{ mA}$	1000 Hrs	10	0/1
2	Thermal Shock	0°C (2min)→ 100°C (2min)	100 Cycles	10	0/1
3	Temperature Cycle	-40°C (30min) →(5min)→+100 °C (30min)	100 Cycles	10	0/1
4	High Temp./ High Humi. Test	85°C/85%RH	500 Hrs	10	0/1
5	High Temperature Storage	Ta=100°C	1000 Hrs	10	0/1
6	Low Temperature Storage	Ta= - 40°C	1000 Hrs	10	0/1
7	Soldering Heat	260°C±5°C	5 Seconds	10	0/1

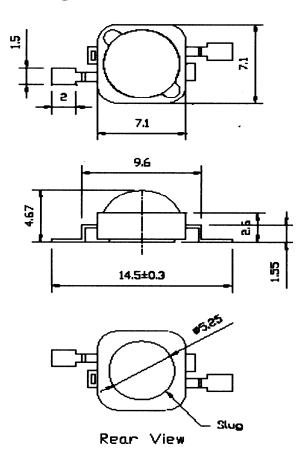






## Technical Data Sheet –3W High Power White LED

## **★** Package Dimensions



#### NOTE:

- 1.All dimensions are in millimeter.
- 2.All dimensions are without tolerance are for reference only. .

### **★**Selection Guide

		Chip		Viewing
Part NO.	N/1-4:-1	E'4. 1 C.1.	Lens	Angle2 $\Theta$
Tartino.	Material	Emitted Color	Color	1/2(deg)
HP-700W-PW-3EN	C N	Pure White	Water	
HP-700W-WW-3EN	GaN -	Warm White	clear	130







## Part No:HP-700W-PW-3EN

## **★**Absolute Maximum Ratings

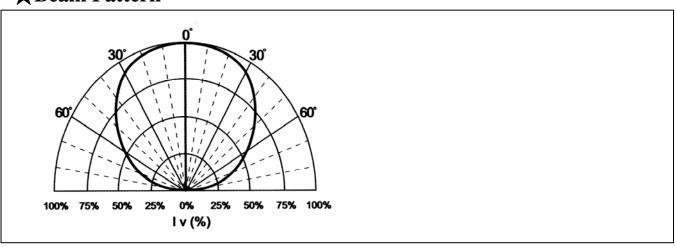
(Ta=25°℃)

Parameter	Symbol	MAX. Rating	Unit
Reverse Current (VR=5V)	IR	10	uA
DC Forward Current	IF	700	mA
Peak Forward current	Ipeak	1000	mA
LED Junction Temperature	TJ	120	${\mathbb C}$
Operating Temperature	Topr	-40~+85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tsto	-40~+100	$^{\circ}$

Soldering Temperature MAX. 260°C for 5 sec MAX.

## **★**Electric-Optical Characteristics

Parameter	Symbol	<b>Test Condition</b>	MIN	TYP	MAX	Unit
Forward Voltage	VF	IF=700mA		3.5	4.0	٧
Reverse Voltage	VR	IR=10uA	5			V
Luminous Flux	IV	IF=700mA	80	150		lm
Color temperature	CCT	IF=700mA		6500	10000	K









## Part No:HP-700W-WW-3EN

## **★**Absolute Maximum Ratings

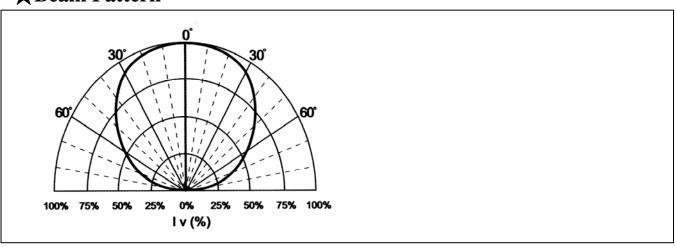
(Ta=25°℃)

Parameter	Symbol	MAX. Rating	Unit
Reverse Current (VR=5V)	IR	10	uA
DC Forward Current	IF	700	mA
Peak Forward current	Ipeak	1000	mA
LED Junction Temperature	TJ	120	${\mathbb C}$
Operating Temperature	Topr	-40~+85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tsto	-40~+100	${\mathbb C}$

Soldering Temperature MAX. 260°C for 5 sec MAX.

## **★**Electric-Optical Characteristics

Parameter	Symbol	<b>Test Condition</b>	MIN	TYP	MAX	Unit
Forward Voltage	VF	IF=700mA		3.5	4.0	V
Reverse Voltage	VR	IR=10uA	5			V
Luminous Flux	IV	IF=700mA	50	90		lm
Color temperature	CCT	IF=700mA		3300	3800	K





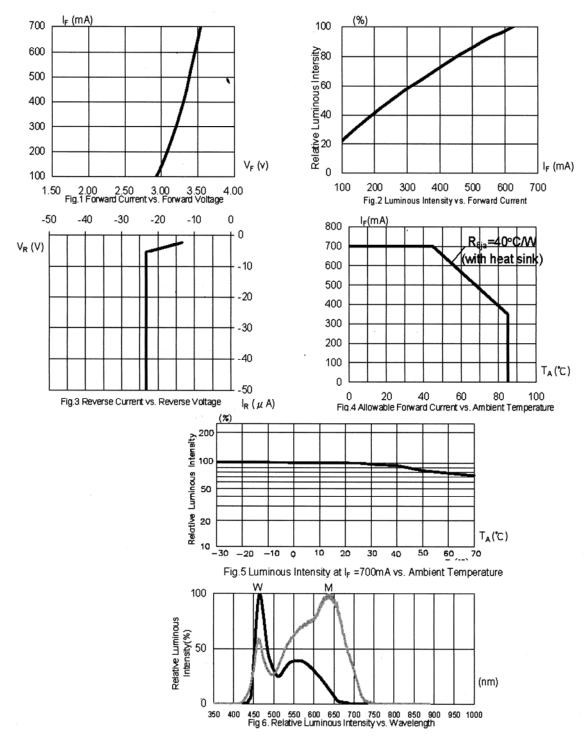




### Part No:HP-700W-xW-3EN

### **★** Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted )









## Part No:HP-700W-xW-3EN

## **★**Reliability Test

No	Item	Test Condition	Test Hours/Cycles	Samples Tested	Acc./Rej
1	Room Temperature DC Oper-ating Life	Ta=25°C, I <sub>F=</sub> 700mA	1000 Hrs	10	0/1
2	Thermal Shock	$0^{\circ}C(2\min) \rightarrow 100^{\circ}C(2\min)$	100 Cycles	10	0/1
3	Temperature Cycle	-40°C (30min) →(5min)→+100 °C (30min)	100 Cycles	10	0/1
4	High Temp./ High Humi. Test	<b>85</b> °C/85%RH	500 Hrs	10	0/1
5	High Temperature Storage	Ta=100°C	1000 Hrs	10	0/1
6	Low Temperature Storage	Ta= - 40°C	1000 Hrs	10	0/1
7	Soldering Heat	260°C±5°C	5 Seconds	10	0/1

ETR ELECTRONICS CO., LTD.