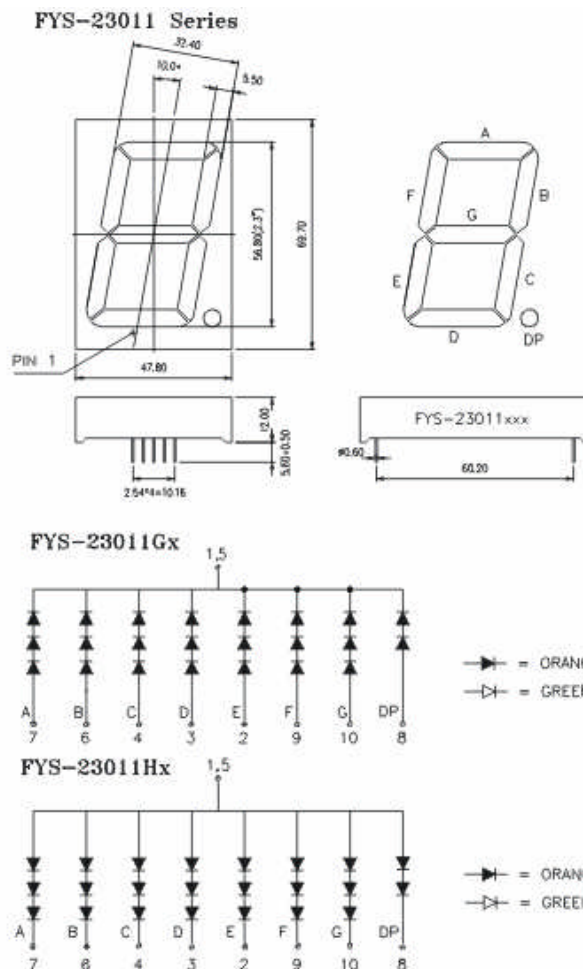




DESCRIPTION

- 56.80mm (2.3") Single digit numeric display series.
- Standard brightness.
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C.boards or sockets

Package Dimensions & Internal Circuit Diagram



Notes:

- All dimensions are in millimeters (inches)
- Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
- Specifications are subject to change without notice.



PartNO.: FYS-23011GW/HW-XX

: Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Test Condition	Value		Unit
			Min	Max	
Reverse Voltage	VR	IR=30μA	5	-----	V
Forward Current	IF	-----	-----	30	mA
Power Dissipation	Pd	-----	-----	100	mW
Pulse Current	Ipeak	Duty=0.1mS, 1KHz	-----	150	mA
Operating Temperature	Topr	-----	-40	+85	° C
Storage Temperature	Tstr	-----	-40	+85	° C

• -XX: Surface / Lens color:

Number	0	1	2	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	

■ **Description:**

• Color Code & Chip characteristics: (Test Condition: IF=20mA)

Emitting Color		Dice Material	Peak Wave Length(λ _P)	Spectral Line halfwidth(Δλ1/2)	Forward Voltage(VF) Unit:V		Luminous Intensity (lv) Unit:mcd
					Typ	Max	
W	White	InGaN	X=0.29,y=0.30		2.80	3.80	180-200
U W	Ultra White	InGaN	X=0.29,y=0.30		2.80	3.80	180-200



PartNO.: FYS-23011GW/HW-XX

Color temperature	4534K			
Chromaticity coordinate	X: 0.3628 Y: 0.3844			
Luminous flux	0.38991lm			
Luminous efficiency	7.031lm/w			
Measure environmental temperature	150 °C			
Double value working temperature	20 °C			
Color rendering index	R1=75	R2=90	R3=95	R4=66
	R4=59	R5=75	R6=80	R7=40
	R9=-1	R10=73		

Classification	Text Item	Test Conditions	Result
Endurance Test	Operation Life	Connect with a power $I_f=30mA$ T_a =Under room temperature Test time=1,000hrs	0/100
	High Temperature High Humidity Storage	$T_a=85^{\circ}C \pm 5^{\circ}C$ RH=90% -95% Test time=1,000hrs	0/100
	High Temperature Storage	High $T_a=105^{\circ}C \pm 5^{\circ}C$ Test time=1,000hrs	0/100
	Low Temperature Storage	Low $T_a=35^{\circ}C \pm 5^{\circ}C$ Test time=1,000hrs	0/100
Environmental Test	Temperature Cycling	$-35^{\circ}C \sim 25^{\circ}C \sim 105^{\circ}C \sim 25^{\circ}C$ 30min 5min 30min 5min Test Time=10cycle	0/100
	Thermal Shock	$105^{\circ}C \pm 5^{\circ}C \sim -35^{\circ}C \pm 5^{\circ}C$ 10min 10min Test Time=10cycle	0/100
	Solder Resistance	$T_{sol}=260^{\circ}C \pm 5^{\circ}C$ Dwell Time= 10 ± 1 sec.	0/50
	Solderability	$T_{sol}=230^{\circ}C \pm 5^{\circ}C$ Dwell Time= 5 ± 1 sec.	0/50
	Lead Stress Bending	$0^{\circ} \sim 90^{\circ} \sim 0^{\circ}$ bend, 3cycles Weight 250g	0/50

ADD: NO.115 QiXin Road NingBo Zhejiang China ZIP.: 315051

TEL: 0086-574-87927870 87933652

FAX:0086-574-87927917

[Http://www.foryard.com](http://www.foryard.com)

E-mail:sales@foryard.com



PartNO.: FYS-23011GW/HW-XX



- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue |
| (5) - GaP 700nm/Bright Red | (C) - InGaN/SiC 505nm/Ultra Green |
| (6) - GaAlAs/GaAs 660nm/Super Red | (D) - InGaAl/SiC 525nm/Ultra Green |
| (8) - GaAsP/GaP 610nm/Super Red | |



FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



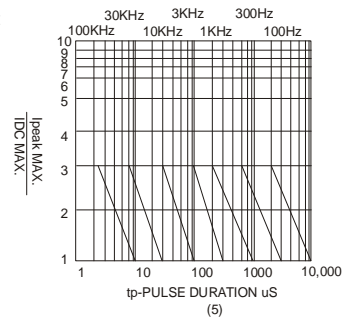
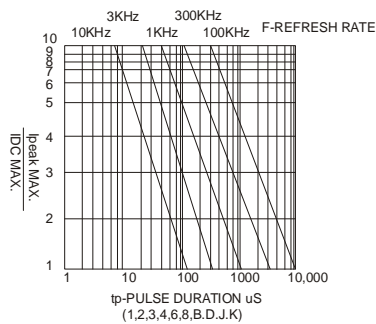
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



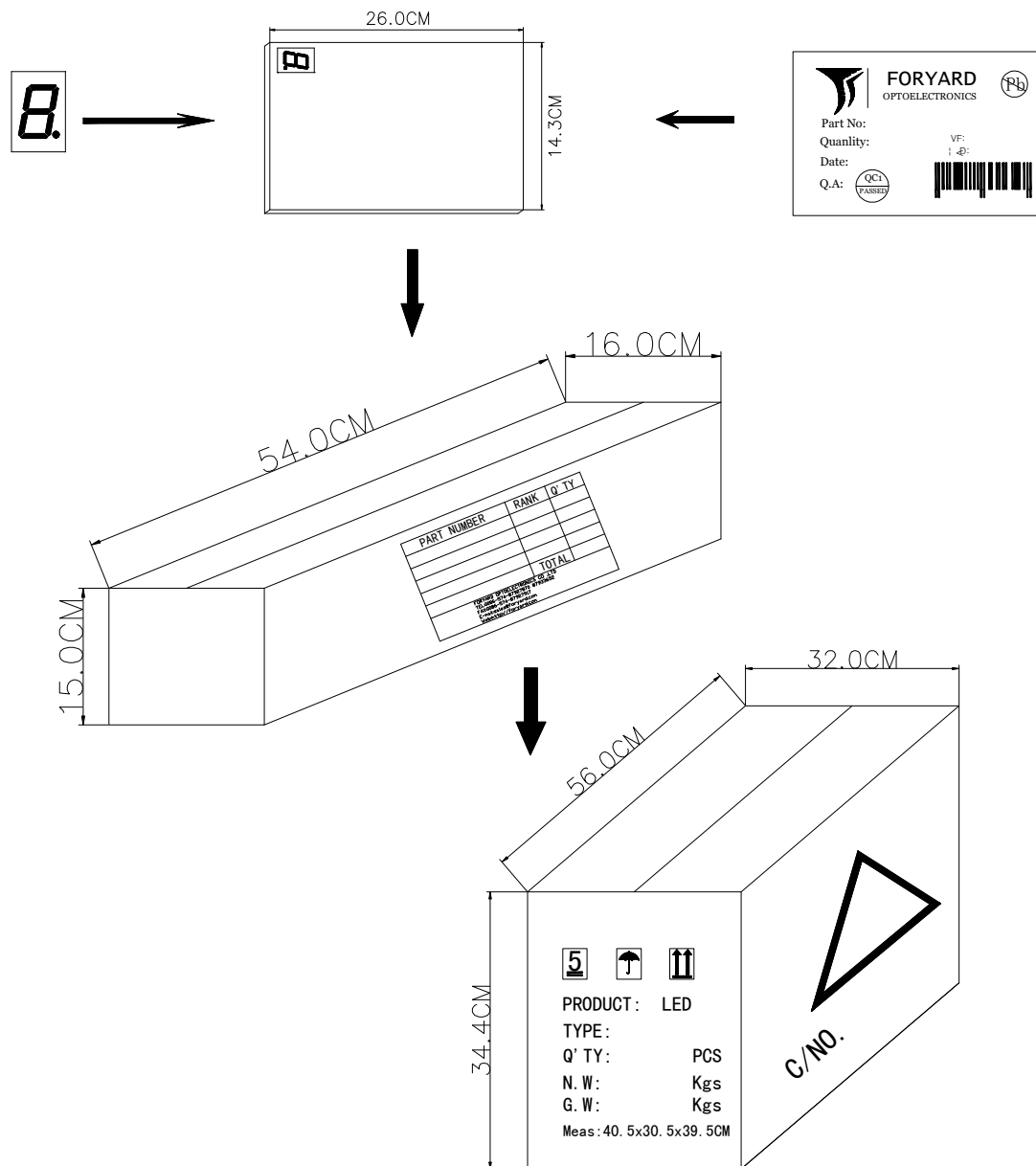
NOTE:25°C free air temperature unless otherwise specified



**NINGBO FORYARD OPTO
ELECTRONICS CO.,LTD.**

LED DIGIT DISPLAY

PartNO.: FYS-23011GW/HW-XX



type	QTY/foam(pcs)	QTY /Bundle (pcs)	QTY /CARTONDimension
FYS-23011G/HW-xx	2*5=10	10*14=140	140*4=560

ADD: NO.115 QiXin Road NingBo Zhejiang China ZIP: 315051
 TEL: 0086-574-87927870 87933652 FAX:0086-574-87927917
[Http://www.foryard.com](http://www.foryard.com) E-mail:sales@foryard.com