



NINGBO FORYARD OPTO
ELECTRONICS CO.,LTD.

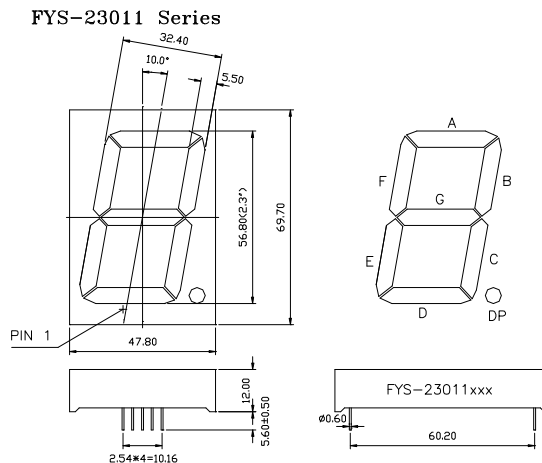
LED DIGIT DISPLAY

PartNO.: FYS-23011EX/FX-XX

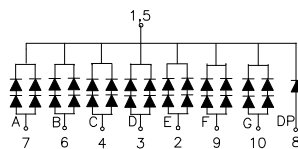
DESCRIPTION

- 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

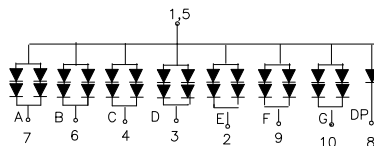
Package Dimensions & Internal Circuit Diagram



FYS-23011Ex



FYS-23011Fx



Notes:

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

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

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

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PartNO.: FYS-23011EX/FX-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

■ Description:

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

Emitting Color		Dice Material	Peak Wave Length (λp)	Spectral Line halfwidth(Δλ1/2)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:ucd
					Typ	Max	
H	Red	GaP/GaP	700nm	90nm	2.25	2.50	500
S	Hi Red	GaAlAs/GaAs,SH	660nm	20nm	1.85	2.20	3500
D	Super Red	GaAlAs/GaAs,DH	660nm	20nm	1.85	2.20	6000
UR	Ultra Red	GaAlAs/GaAs,DD H	660nm	20nm	1.85	2.20	12000
E	Orange	GaAsP/GaP	635nm	35nm	2.10	2.50	2500
Y	Yellow	GaAsP/GaP	585nm	35nm	2.10	2.50	2000
G	Green	GaP/GaP	570nm	30nm	2.20	2.50	2500

• -XX: Surface / Lens color:

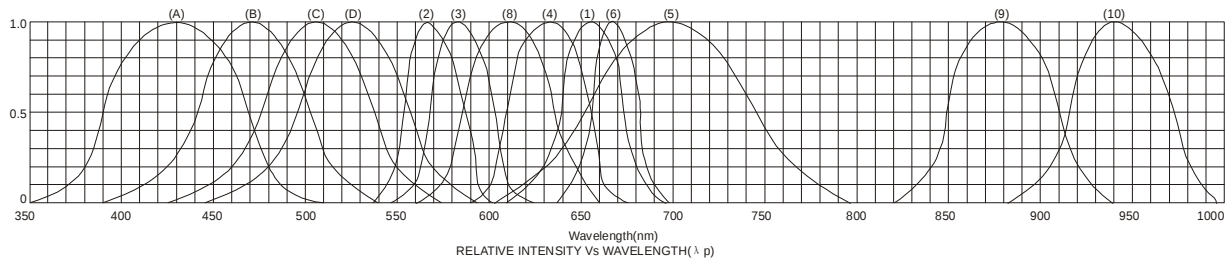
Number	0	1	2	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	



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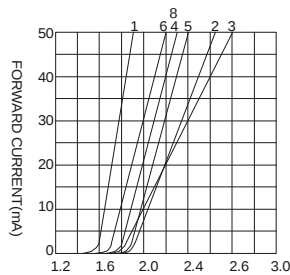
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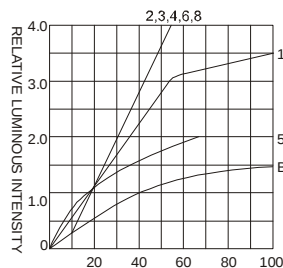


- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red

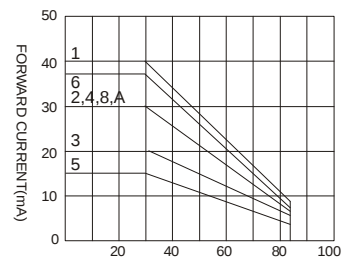
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) - GaN/SiC 430nm/Blue
- (B) - InGaN/SiC 470nm/Blue
- (C) - InGaN/SiC 505nm/Ultra Green
- (D) - InGaAl/SiC 525nm/Ultra Green



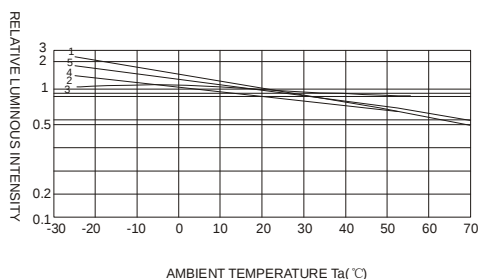
FORWARD VOLTAGE (V)
FORWARD CURRENT VS.
FORWARD VOLTAGE



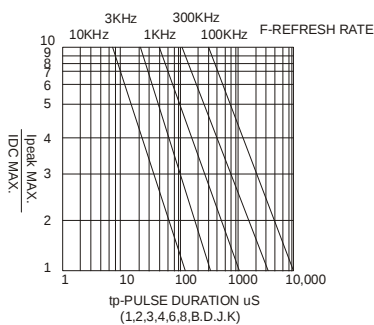
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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

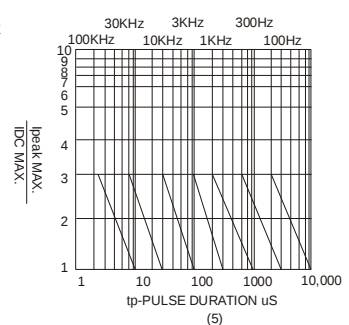


AMBIENT TEMPERATURE Ta (°C)



Peak MAX.
IDC MAX.

tp-PULSE DURATION μs
(1,2,3,4,6,8,B,D,J,K)



Peak MAX.
IDC MAX.

(5)

NOTE: 25°C free air temperature unless otherwise specified

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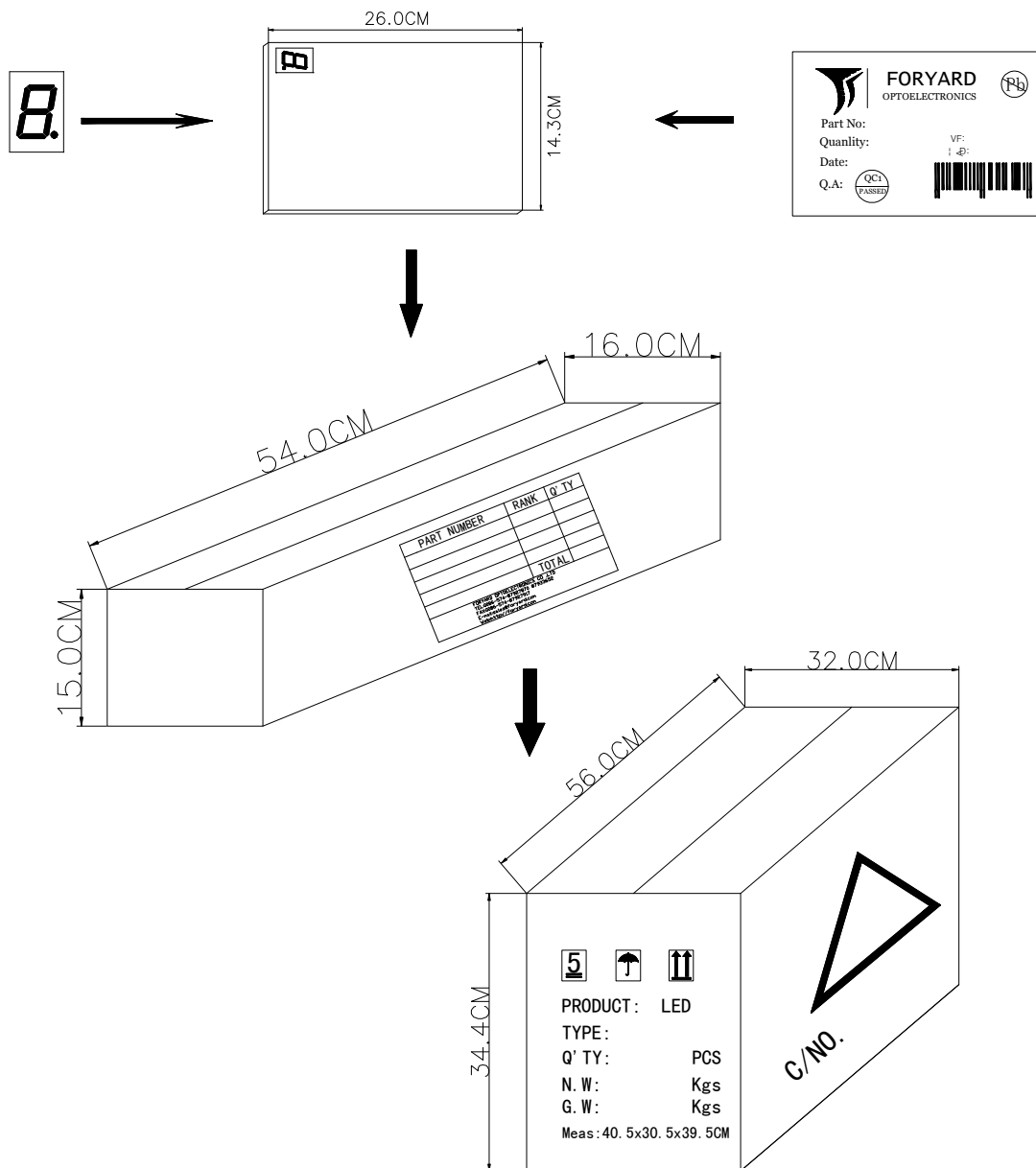
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tapy	QTY/foam(pcs)	QTY /Bundle (pcs)	QTY /CARTONDimension
FYS-23011E/Fx-xx	2*5=10	10*14=140	140*4=560

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