

Features:

- 10.0mm (0.39") Three digit numeric display series.
- Standard brightness.
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C.boards or sockets.
- I.C.compatible.

Part No.:

| Common Cathode | Iv TYP.(mcd) | Common Anode | Iv TYP.(mcd) |
|----------------|--------------|--------------------|--------------|
| EYT-3931AH-XX | 8 | EYT-3931BH-XX | 8 |
| EYT-3931AS-XX | 56 | EYT-3931BS-XX | 56 |
| EYT-3931AD-XX | 96 | EYT-3931BD-XX | 96 |
| EYT-3931AUR-XX | 112 | EYT-3931BUR-X X | 112 |
| EYT-3931AE-XX | 40 | EYT-3931BE-XX | 40 |
| EYT-3931AY-XX | 32 | EYT-3931BY-XX | 32 |
| EYT-3931AG-XX | 40 | EYT-3931BG-XX | 40 |

Description:

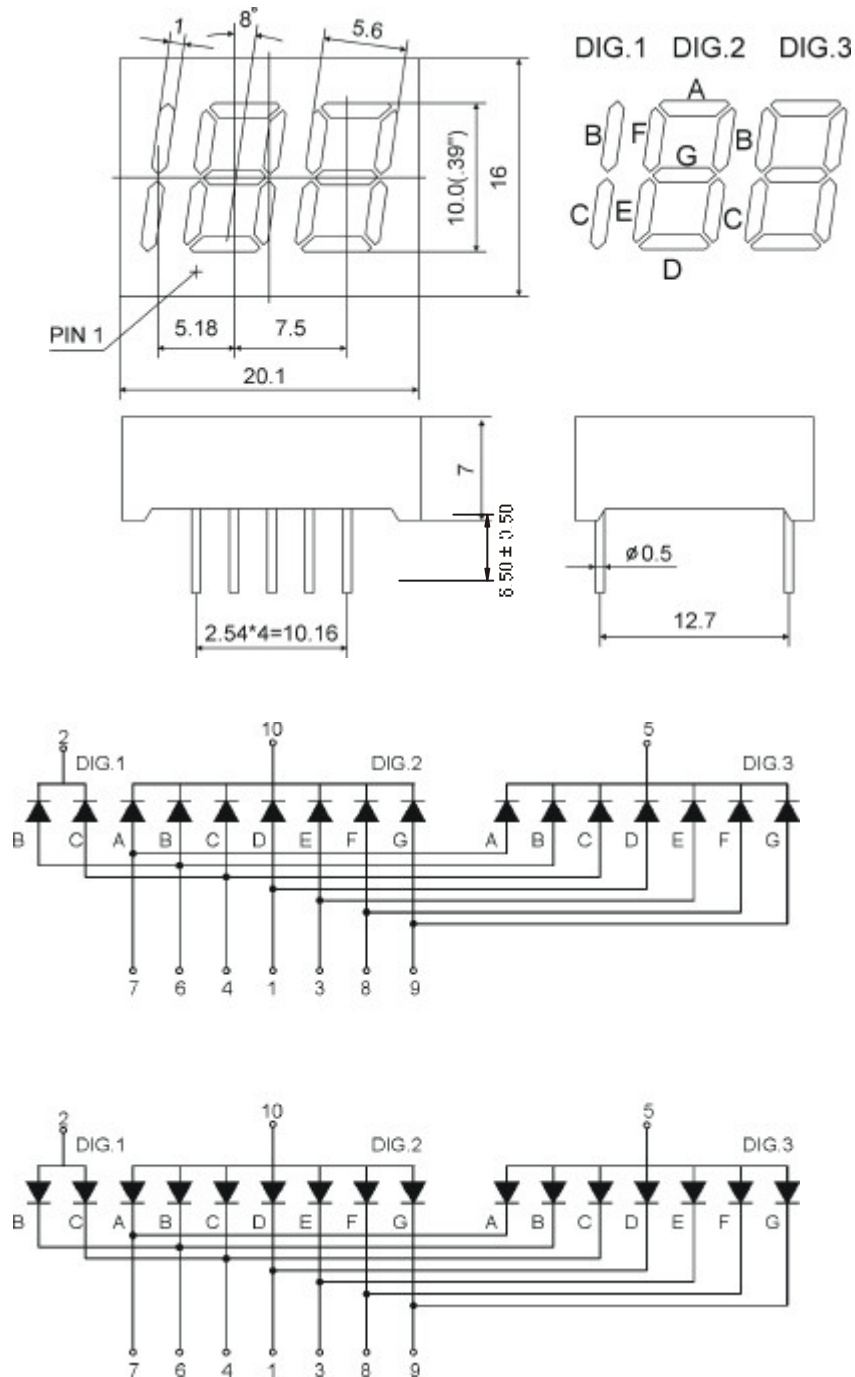
- Color Code & Chip characteristics: (Test Condition: IF=20mA)

| Emitting Color | | Dice Material | Peak Wave Length (λ P) | Spectral Line halfwidth(λ 1/2) | Forward Voltage(VF) Unit:V | | Luminous Intensity (Iv) Unit:ucd |
|----------------|-----------|---------------------|------------------------|--------------------------------|----------------------------|------|----------------------------------|
| | | | | | Typ | Max | |
| H | Red | GaP/GaP | 700nm | 90nm | 2.25 | 2.60 | 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 | 7000 |
| 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 | |

Package configuration & 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.

Electrical-optical characteristics: (Ta=25)

| Parameter | Symbol | GaP(Red) | AlGaAs | GaAsP | GaP(Green) | Unit |
|----------------------------|----------|----------|--------|-------|------------|------|
| Power Dissipation | P_{ad} | 40 | 60 | 80 | 80 | mW |
| Peak Forward Current * | I_{pf} | 50 | 150 | 150 | 150 | mA |
| Continuous Forward Current | I_{af} | 15 | 25 | 30 | 30 | mA |

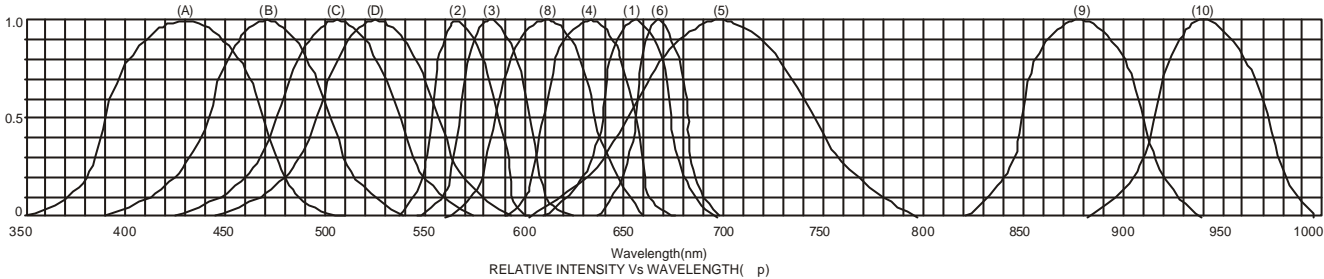
Notes:

- * Test Condition = Duty 0.1,10KHZ

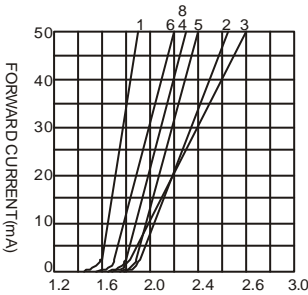
Absolute maximum ratings (Ta=25)

| | |
|---|-------------------|
| Reverse Voltage | 5V |
| Reverse Current | 20 μ A |
| Operating Temperature Range | -40 to+85 |
| Storage Temperature Range | -40 to+85 |
| Lead Solder Temperature (1.6mm(1/16")from body) | 230 for 5 Seconds |

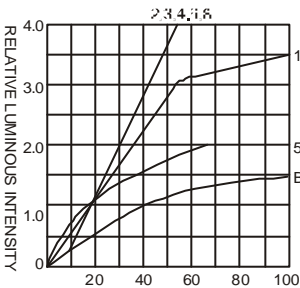
Typical electrical-optical characteristics curves:



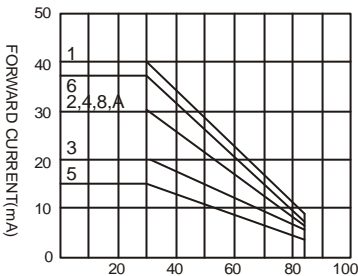
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



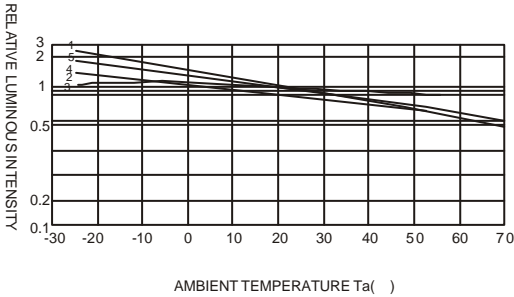
FORWARD VOLTAGE (V)
FORWARD CURRENT VS.
FORWARD VOLTAGE



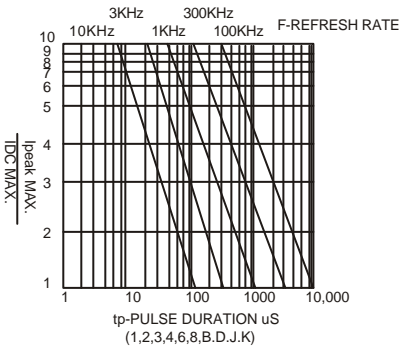
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



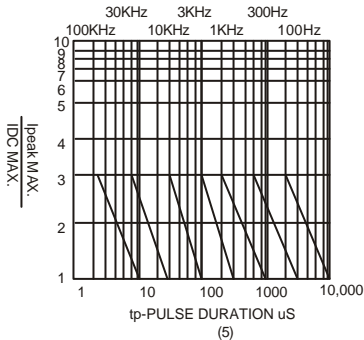
AMBIENT TEMPERATURE Ta (°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta (°C)



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



tp-PULSE DURATION μS
(5)

NOTE:25 free air temperature unless otherwise specified