

**Product :**  
0.40 " SINGLE DIGIT DISPLAY

**Part Number :**  
VAOS-C402G9-BW/50  
VAOS-A402G9-BW/50

**Description**  
Chip Material-G: GaP/GaP.  
Emitted Color: Yellow Green.  
Black Face & White Segment.

VAOS-C402G9-BW/50  
Common Cathode.

VAOS-A402G9-BW/50  
Common Anode.

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Yellow Green	Unit
Power dissipation per dice	PAD	70	mW
Derating Liner from 25°C per dice	-	0.33	mA°C
Continuous forward current per dice	IAF	25	mA
Peak current per dice (duty cycle 1/10, 1kHz)	IPF	90	mA
Reverse voltage per dice	VR	5	V
Operating temperature	Topr	-25 to +85	°C
Storage temperature	Tstg	-25 to +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			

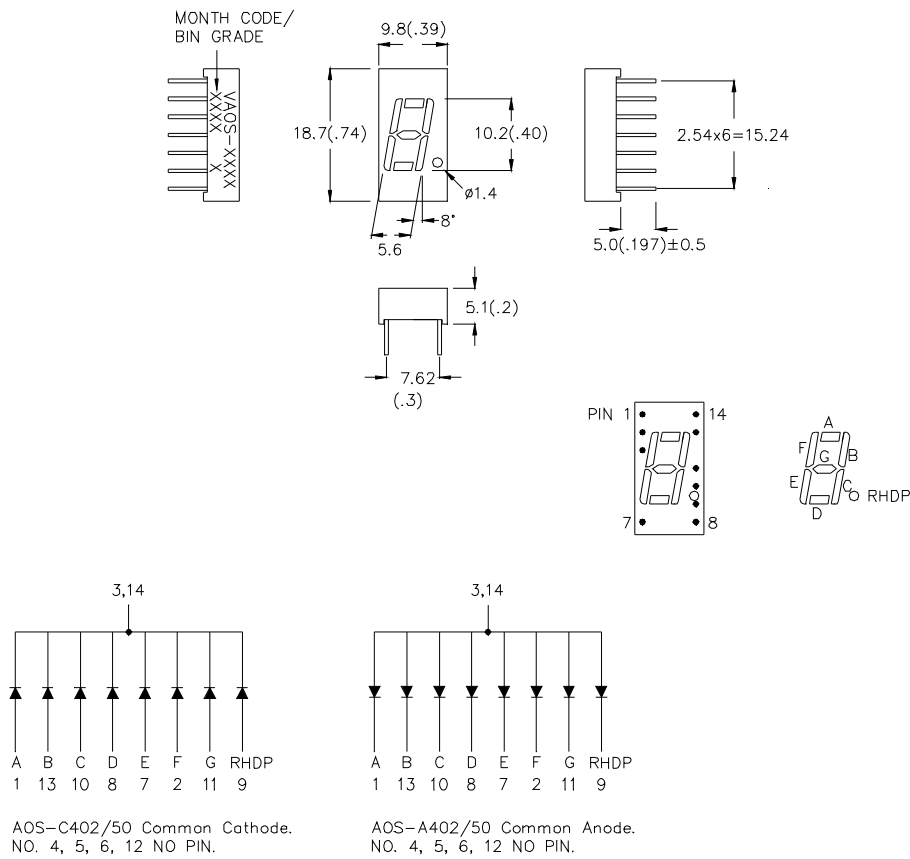
Electrical / Optical Characteristics and Curves at Ta=25°C

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage per segment	VF	IF=20 mA		2.1	2.8	V
Luminous intensity per segment	IV	IF=20 mA		7.0		mcd.
Peak emission wavelength	$\lambda d$	IF=20 mA		565		nm
Spectrum radiation bandwidth	$\Delta \lambda$	IF=20 mA		30		Deg.
Reverse Current	IR	VR=5 V			100	$\mu A$

\* Tolerance :  $\pm 20\%$ .

## Package Dimension & Internal Circuit

- \* 0.4 inch (10.16mm) Digit height.
- \* Case mold type.
- \* Wide viewing angle.



### NOTE:

1. All pins are  $\phi 0.45 (.02)$ .
2. Dimension in millimeter (inch), and tolerance is  $\pm 0.30 (.01)$  unless otherwise noted.

VER\_A-09-09-P50

# GREEN

## Typical Electro-optical Characteristic Curves (25°C Free Air Temperature Unless Otherwise Specified)

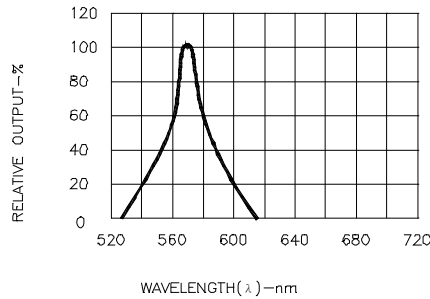


Fig.1 SPECTRAL RESPONSE

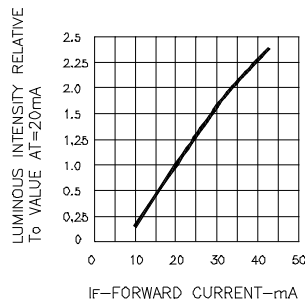


Fig.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

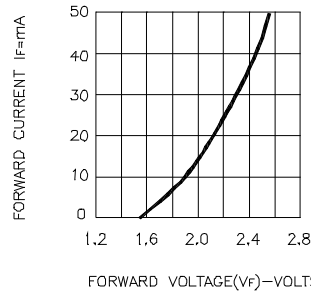


Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE

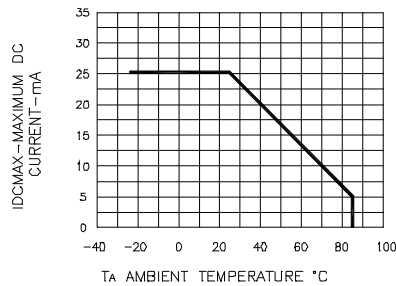


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

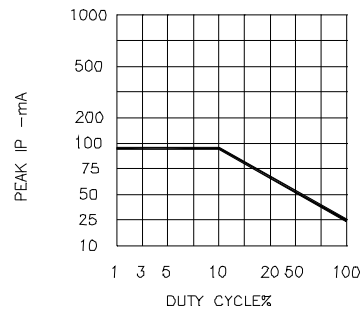


Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1KHz)