

Product :
0.40 " SINGLE DIGIT DISPLAY

Part Number :
VAOS-C402S9-BW/50
VAOS-A402S9-BW/50

Description

Chip Material-S: AlGaAs/GaAs.
Emitted Color: Super Bright Red.
Black Face & White Segment.

VAOS-C402S9-BW/50
Common Cathode.

VAOS-A402S9-BW/50
Common Anode.

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Super Bright Red	Unit
Power dissipation per dice	PAD	75	mW
Derating Liner from 25°C per dice	-	0.42	mA°C
Continuous forward current per dice	IAF	30	mA
Peak current per dice (duty cycle 1/10, 1kHz)	IPF	150	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			

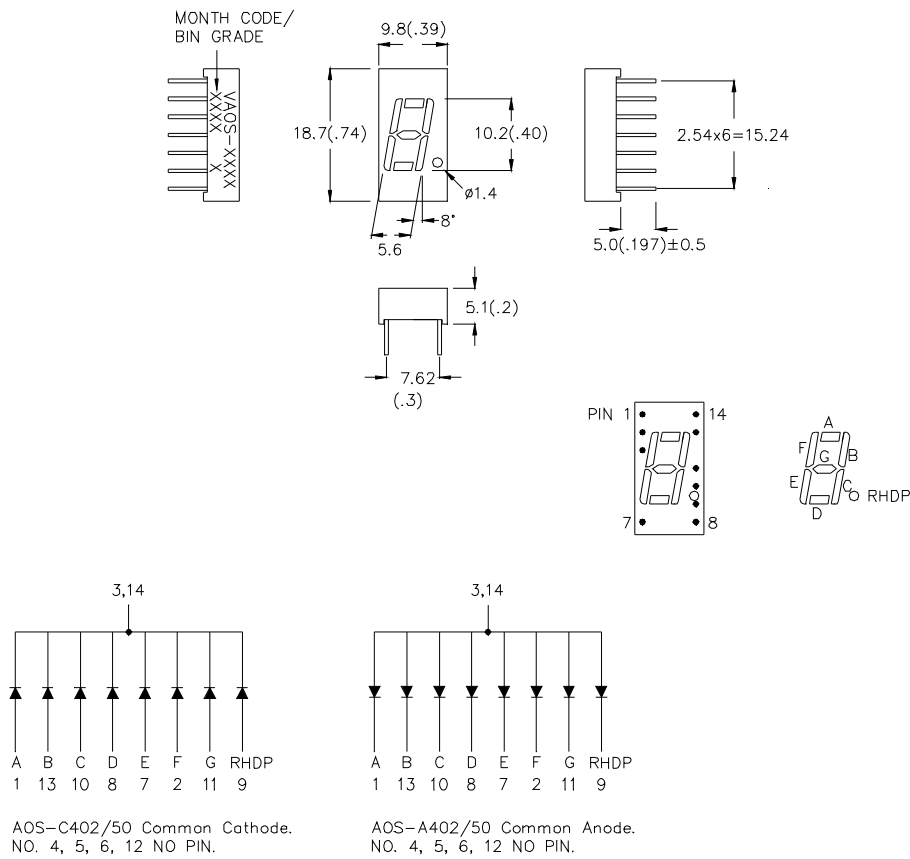
Electrical / Optical Characteristics and Curves at Ta=25°C

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage per segment	VF	IF=20 mA		1.8	2.5	V
Luminous intensity per segment	IV	IF=20 mA		7.5		mcd.
Peak emission wavelength	λd	IF=20 mA		660		nm
Spectrum radiation bandwidth	$\Delta \lambda$	IF=20 mA		20		Deg.
Reverse Current	IR	VR=5 V			100	μA

* 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

RED

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

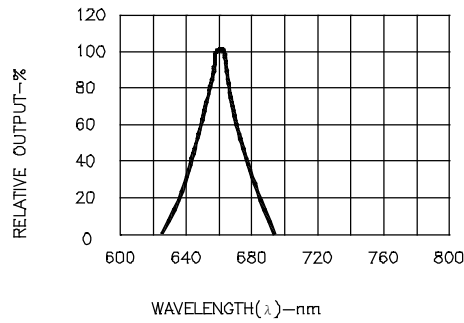


Fig.1 SPECTRAL RESPONSE

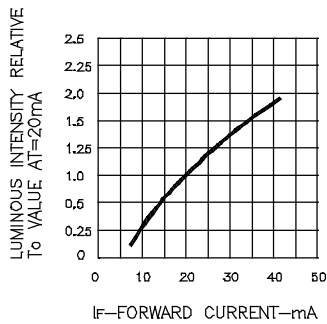


Fig.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



Fig.3 FORWARD CURRENT VS FORWARD VOLTAGE



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

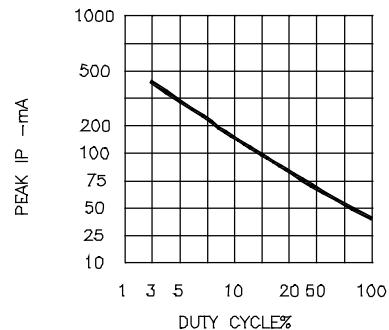


Fig.5 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1KHz)