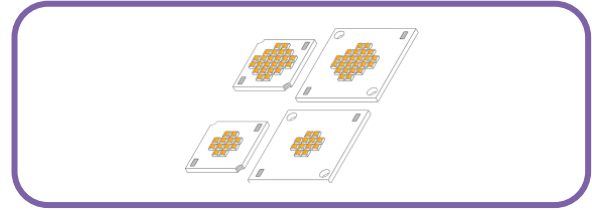
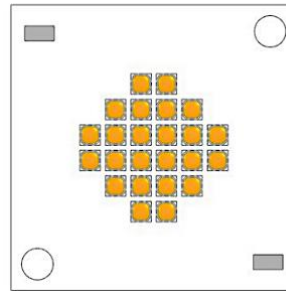
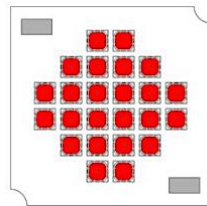


DOWNLIGHT COLOR ARRAYS



Features:

- > Wide selection of COB-equivalent arrays using discrete component designs for specific wavelengths
- > Loda Color arrays available in blue (470nm), green (530nm), amber (590nm), and red (625nm)
- > Zhaga Book 12 compliant arrays available in C19x19 and C28x28 with LES9 and LES13



Part Number	COB Size [mm]	LES [mm]	Color (Wavelength)	Vf	Max Light Output [lm]
V19L09SA2-XX0700 V28L09SA2-XX0700	C19x19 C28x28	9	Blue (465-485nm)	35 – 40V	1,045
			Green (520-540nm)	31 – 36V	2,485
			Amber (585-600nm)	25 – 30V	2,050
			Red (624-634nm)	24 – 32V	2,010
V19L13SA2-XX1400 V28L13SA2-XX1400	C19x19 C28x28	13	Blue (465-485nm)	35 – 40V	2,090
			Green (520-540nm)	31 – 36V	4,970
			Amber (585-600nm)	25 - 30V	4,100
			Red (624-634nm)	24 – 32V	4,020

Arkalumen Products may be covered by patents in the US and elsewhere. www.arkalumen.com/intellectual-property/

Warranty Operation Range

Part Number	Maximum Current	Operating Temperature Range [°C]	Control Range ¹
V19L09SA2-XX0700	1050mA	-40.0 to +75.0 LoDAs are designed to be heat sunked and operated under 75°C.	100% to 1%
V28L09SA2-XX0700	1050mA		
V19L13SA2-XX1400	2100mA		
V28L13SA2-XX1400	2100mA		

1. Control range is dependent on driver resolution.

Junction Temperature (T_j): Lumen Multiplication Factor

Color (Wavelength)	25°C	45°C	65°C	85°C
Blue (465-485nm)	0.99	1.00	1.01	1.02
Green (520-540nm)	1.03	1.00	0.97	0.94
Amber (585-600nm)	1.37	1.00	0.69	0.47
Red (624-634nm)	1.15	1.00	0.85	0.71

Electrical Characteristics ($T_j = 45^\circ\text{C}$)

Blue (470nm)

Part Number	LES [mm]	Vf	700mA		1400mA	
			Luminous Flux [lm]	Efficacy [lm/W]	Luminous Flux [lm]	Efficacy [lm/W]
V19L09SA2-360700-BL V28L09SA2-360700-BL	9	35 – 40V	795	30		
V19L13SA2-361400-BL V28L13SA2-361400-BL	13	35 – 40V	965	39	1,590	30

Green (530nm)

Part Number	LES [mm]	Vf	700mA		1400mA	
			Luminous Flux [lm]	Efficacy [lm/W]	Luminous Flux [lm]	Efficacy [lm/W]
V19L09SA2-360700-GN V28L09SA2-360700-GN	9	31 – 36V	1,945	82		
V19L13SA2-361400-GN V28L13SA2-361400-GN	13	31 – 36V	2,465	111	3,890	82

Amber (590nm)

Part Number	LES [mm]	Vf	700mA		1400mA	
			Luminous Flux [lm]	Efficacy [lm/W]	Luminous Flux [lm]	Efficacy [lm/W]
V19L09SA2-260700-AM V28L09SA2-260700-AM	9	25 – 30V	1,455	74		
V19L13SA2-261400-AM V28L13SA2-261400-AM	13	25 – 30V	1,515	84	2,910	74

Red (625nm)

Part Number	LES [mm]	Vf	700mA		1400mA	
			Luminous Flux [lm]	Efficacy [lm/W]	Luminous Flux [lm]	Efficacy [lm/W]
V19L09SA2-260700-RD V28L09SA2-260700-RD	9	24 – 32V	1,420	71		
V19L13SA2-261400-RD V28L13SA2-261400-RD	13	24 – 32V	1,515	87	2,840	71

Mechanical Characteristics

Part Number	COB Size [mm]	LES [mm]	# of LEDs	# of Contacts
V19L09SA2	C19x19	9	12	2
V28L09SA2	C28x28	9	12	2
V19L13SA2	C19x19	13	24	2
V28L13SA2	C28x28	13	24	2

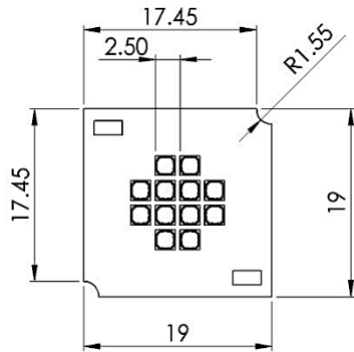


Figure 1 – V19L09SA2 Mechanical Drawing

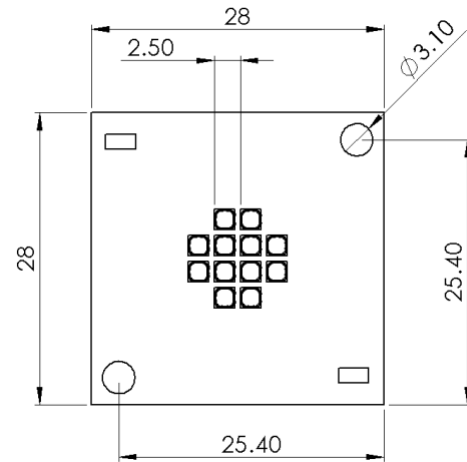


Figure 2 – V28L09SA2 Mechanical Drawing

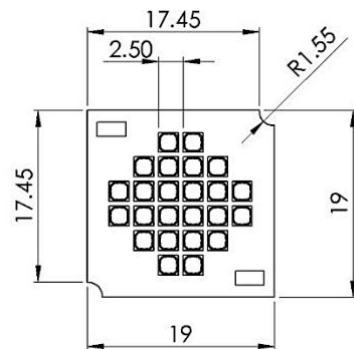


Figure 3 – V19L13SA2 Mechanical Drawing

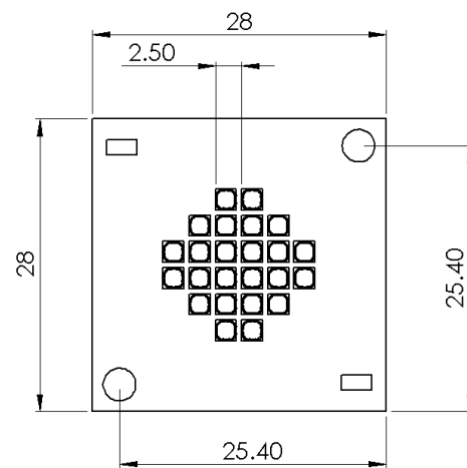


Figure 4 – V28L13SA2 Mechanical Drawing