

## 040 Heatsink Selection

Sometimes the correct heatsink choice is not always clear. To help address this, Eravant matches each **part's package** with an **associated heatsink**. To determine what heatsink works with your device there is a **straightforward process**.

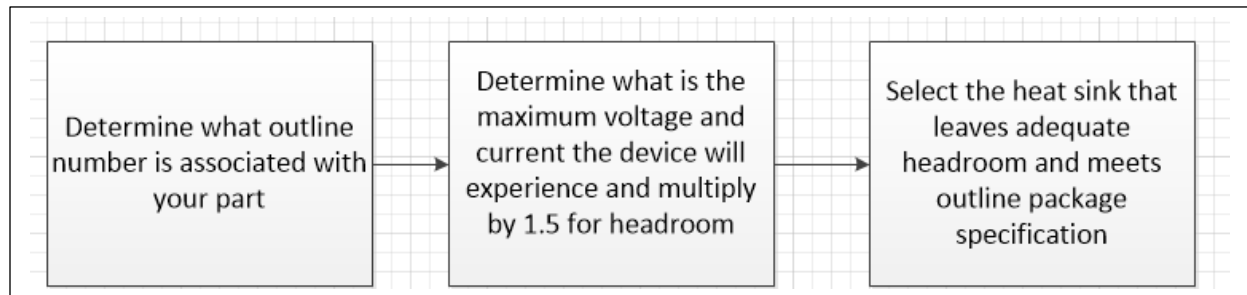


Figure 1. Process flow for determining correct heatsink

To illustrate an example, we will walkthrough **SBP-5037033518-VFVF-S1**. First, we look at the product datasheet. Under **Mechanical Specifications** we see that the outline is **BG-SC-1**. We then move up to the **Electrical Specifications** section to determine what is the **Maximum DC Voltage** and DC Supply **Current**. In our example this is **15 VDC** and **0.65 A** multiplying these two quantities and **1.5** for headroom we obtain **14.625 W**. We then take these two quantities (BG-SC-1 and 14.625W) and look at our table.

Wattage (Max)	15W	45W			95W	
Heatsink Model #	SUA-15-S1	SUA-45-S1	SUA-45-S2	SUA-45-S3	SUA-95-S1	SUA-95-S2
Heatsink Outline #	UA-15-1	UA-45-1	UA-45-2	UA-45-3	UA-95-1	UA-95-2
COMPATIBLE PACKAGES	OUTLINE #					
	BG-S3-2	BG-SC-1-2.0	BG-SC-1-2.0	BB-ZC-2	BG-SC-1-2.0	BG-SC-1-2.0
	BG-SA-1	BG-SA-1	BG-SA-1	BG-ZC-1	BG-SA-1	BG-SA-1
	BG-SA-1CW	BG-SA-1-CW	BG-SA-1CW	BL-ZC-6	BG-SA-1CW	BG-SA-1CW
	BG-SA-1WC	BG-SA-1-WC	BG-SA-1WC	BL-ZC-8	BG-SA-1WC	BG-SA-1WC
	BG-SA-2	BG-SC-1	BG-SE-2-A		BG-SQ-1	BG-SQ-1
	BG-SA-2CW	BG-SC-1-CC	BG-SE-2-C		BG-SU-1	BG-SU-1
	BG-SA-2WC	BG-SC-1-VG	BG-SE-2-CC		BG-SC-1	BG-SA-2-2.0-VG

Figure 2. Table to determine Heatsink selection

We can see that **BG-SC-1** is found in multiple columns; however, the correct column would be the **45W** list as this is **well above** the **14.625W** maximum. If customers would like to accept the risk of choosing a lower power dissipation, they can elect to go with the SUA-15-S1 but Eravant would propose the **SUA-45-S1** for this example.

Wattage (Max)	15W	45W			95W	
Heatsink Model #	SUA-15-S1	SUA-45-S1	SUA-45-S2	SUA-45-S3	SUA-95-S1	SUA-95-S2
Heatsink Outline #	UA-15-1	UA-45-1	UA-45-2	UA-45-3	UA-95-1	UA-95-2
COMPATIBLE PACKAGES	OUTLINE #					
	BG-S3-2	BG-SC-1-2.0	BG-SC-1-2.0	BB-ZC-2	BG-SC-1-2.0	BG-SC-1-2.0
	BG-SA-1	BG-SA-1	BG-SA-1	BG-ZC-1	BG-SA-1	BG-SA-1
	BG-SA-1CW	BG-SA-1-CW	BG-SA-1CW	BL-ZC-6	BG-SA-1CW	BG-SA-1CW
	BG-SA-1WC	BG-SA-1-WC	BG-SA-1WC	BL-ZC-8	BG-SA-1WC	BG-SA-1WC
	BG-SA-2	BG-SC-1	BG-SE-2-A		BG-SQ-1	BG-SQ-1
	BG-SA-2CW	BG-SC-1-CC	BG-SE-2-C		BG-SU-1	BG-SU-1
	BG-SA-2WC	BG-SC-1-VG	BG-SE-2-CC		BG-SC-1	BG-SA-2-2.0-VG
	BG-SC-1	BG-S3-2	BG-SV-2-A		BG-SC-1-CC	BG-SA-3
	BG-SC-1-CC	BG-SA-2	BG-SW-2		BG-SC-1-VG	BG-SV-2-A
	BG-SC-1-VG	BG-SA-2-2.0-VG	FA-SE-1		BG-SK-2CW	BG-SE-2-A
	BG-SE-2-A	BG-SA-2CW	FA-SE-1-1.8		BG-SK-2WC	BG-SE-2-C
	BG-SE-2-C	BG-SA-2WC	FA-SE-2CW-A-1.8		BG-S3-2	BG-SE-2-CC
	BG-SE-2-CC	BG-SA-3	FA-SQ-1		BG-SA-2	BG-SW-2
	BG-SQ-2-A	BG-SQ-2-A	FA-SU-1		BG-SA-2CW	FA-SV-1-1.8
	BG-SQ-2WC-A	BG-SQ-2WC-A	FA-SV-1-1.8		BG-SA-2WC	FA-SV-2CW-A-1.8
	BG-SU-2-A	BG-SU-2-A	FA-SV-2CW-A-1.8		BG-SQ-2-A	FA-SE-1-1.8
	BG-SU-2WC-A	BG-SU-2WC-A	FA-SW-1		BG-SQ-2WC-A	FA-SE-2CW-A-1.8
	BG-SV-2-A	BG-SV-1	FA-SW-1-1.8		BG-SU-2-A	FA-SW-1-1.8
	BG-SW-2	BG-SE-1	FA-SW-2CW-A-1.8		BG-SU-2WC-A	FA-SW-2CW-A-1.8
	FA-SA-2	BG-SE-1-VG			BG-SV-1	
	FA-SA-2CW	BG-SW-1			BG-SE-1	
	FA-SE-1	BG-SW-1-VG			BG-SE-1-VG	
	FA-SQ-2CW-A	FA-SA-2			BG-SW-1	
	FA-SU-2CW-A	FA-SA-2CW			BG-SW-1-VG	
	FA-SW-1	FA-SQ-2CW-A			FA-SA-2	
		FA-SU-2CW-A			FA-SA-2CW	
					FA-SQ-1	
					FA-SQ-2CW-A	
					FA-SU-1	
					FA-SU-2CW-A	