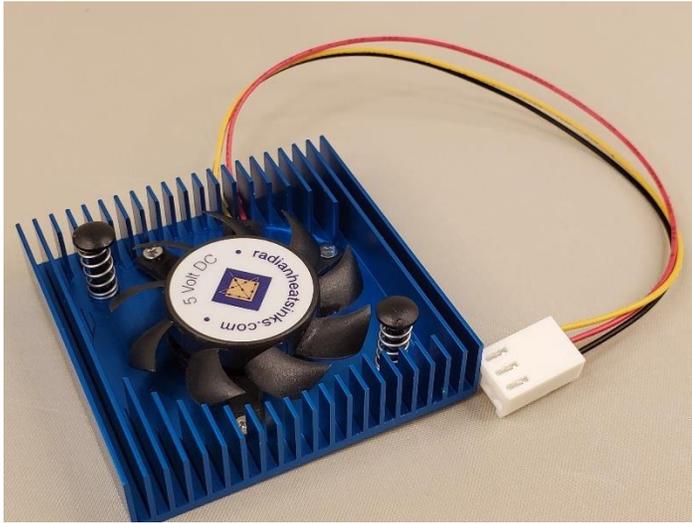




radian

Sub-Zero PCIe Fansink – SZ05S

Radian Thermal Products has been committed to helping our customers with full-service mechanical and thermal solutions since 1974. Radian offers a range of standard PCIe active and passive cooling solutions as well as custom designs to meet customer requirements.



Description:

- Sub-Zero PCIe Fansink, 50 x 50 x 10.5mm, 5V

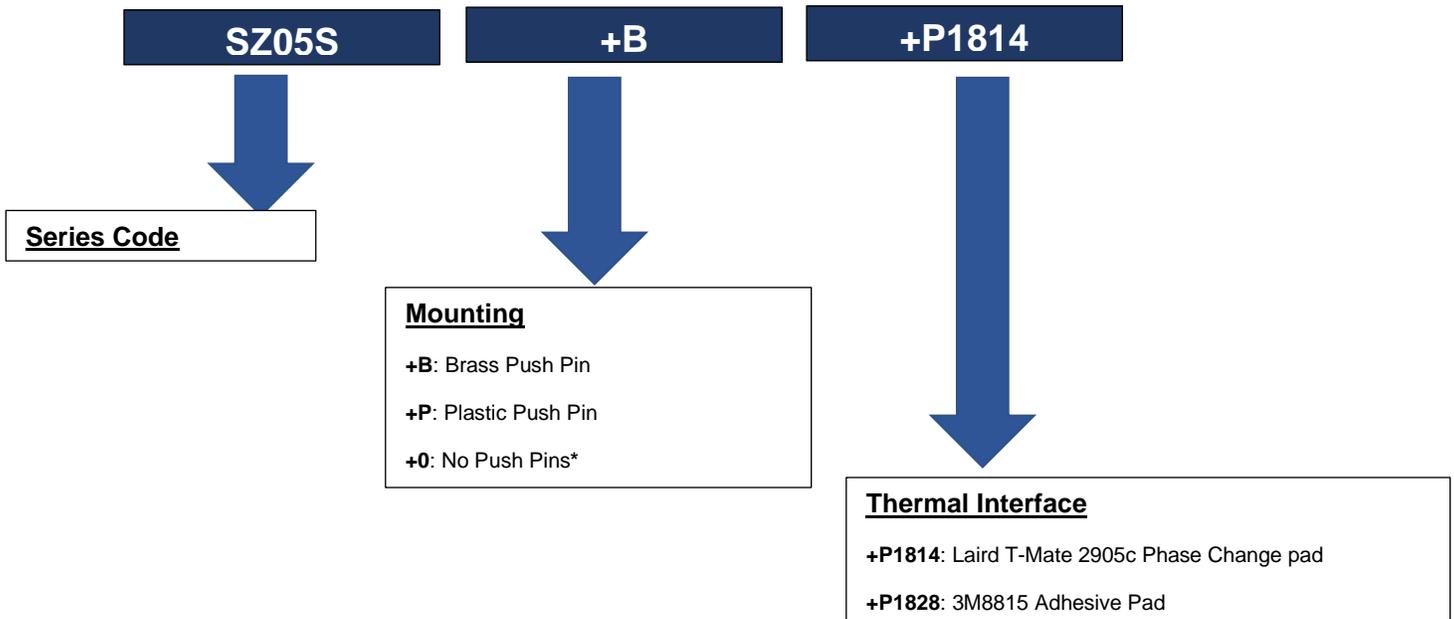
Buy Online at:

Radianheatsinks.com

PART	SZ05S
MOUNTING	Push Pin
MATERIAL	Aluminum
LENGTH (mm)	50.0
WIDTH (mm)	50.0
HEIGHT (mm)	10.5
VOLTAGE (V DC)	5.0

Model Numbering System

Part numbers can be customized as follows:



***Must be combined with 3M8815 Adhesive Pad.**

Fansink Specifications

Thermal Data	
Θ_{SA}^1 (°C/W)	2.2
TIM Options	3M 8815 Adhesive Pad
	LAIRD T-MATE 2905c
	Contact Radian for other options

Mechanical Data	
Assembly Dimensions	See Figure 1
Heatsink Material	Aluminum
Surface Finish	Radian Blue Anodized
Force per Push Pin (lb _f)	Brass: 1.6 ±15% Maximum
	Plastic: 1.6 ±15% Maximum
Push Pin Effective Length (mm) (See Figure 2)	Brass: 13.72 ±0.127
	Plastic: 12.29 ±0.127
Maximum Combined Thickness (mm) ²	Brass: 11
	Plastic: 9.5
Push Pin Extension Length under PCB (mm) (See Figure 2)	Brass: 2.16 ±0.127
	Plastic: 3.2 ±0.127
Recommended PCB Hole Diameter for Push Pin (mm)	Brass: 3.0
	Plastic: 3.2
Connector	Molex 22-01-3037
Connector Receptacle	Mates KK 254 PCB Headers
Mass (g)	23
Noise (dB)	33.85

Electrical Data	
Operating Voltage (V _{DC})	5
	6.2 Max
Connector Pins	08-50-0114 OR EQUIVALENT
Starting Voltage (VDC)	4 (ON/OFF)
Input Current (A)	0.19 +/- 0.02
Wire Description	See Figure 1
Signal Circuit	See Figure 3

Environmental Data	
Operating Temperature (°C)	-10 to +70
Storage Temperature (°C)	-40 to +75
Operating Humidity (%RH)	5 to 90
Storage Humidity (%RH)	5 to 95
MTBF	30,000 hours continuous operation at 25°C with 15~65 %RH.

¹ Typical value, actual performance may vary depending on application environment.

² Combined thickness is the sum of the PCB, chip, thermal pad and heatsink base thicknesses.

Fansink Assembly Drawings

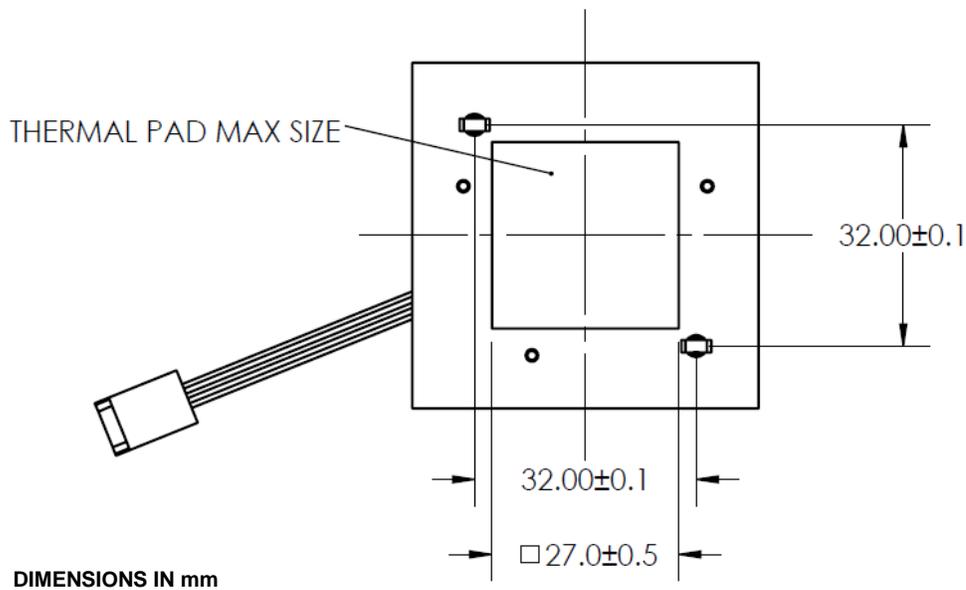
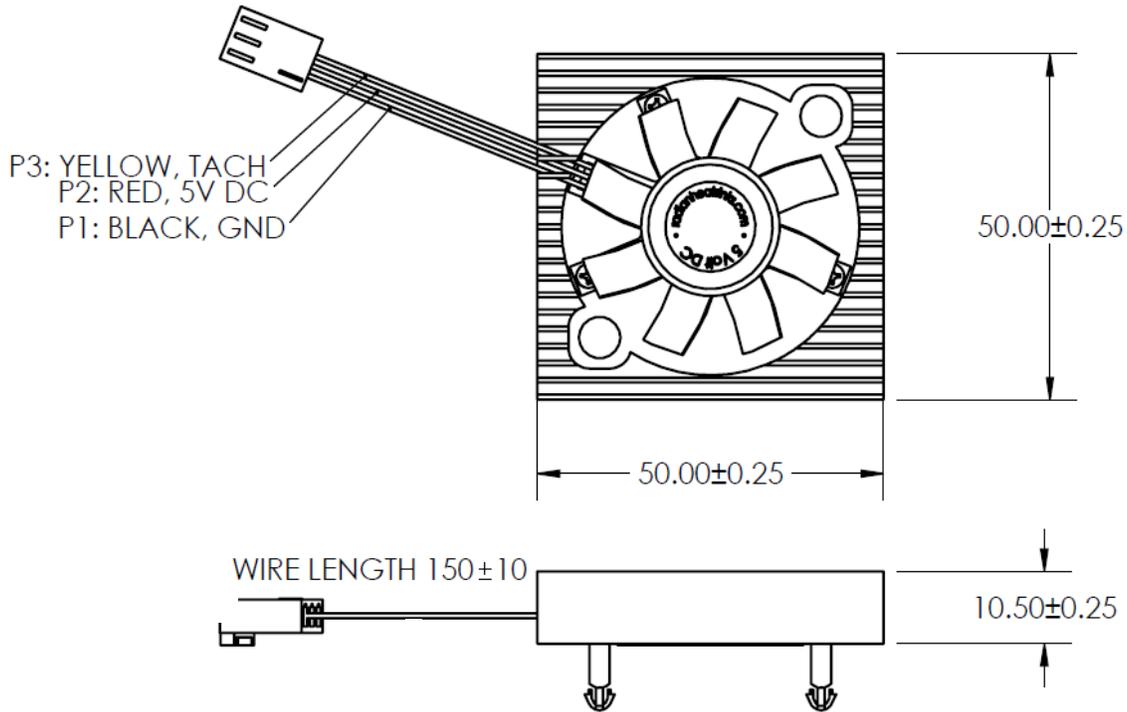


Figure 1: SZ05S Mechanical Drawings

Push Pin Illustration

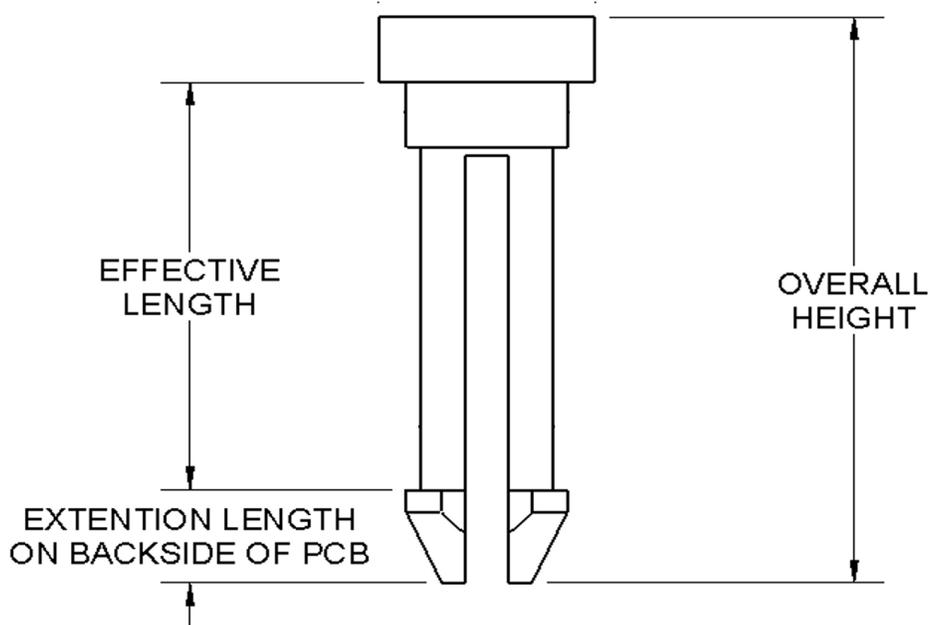
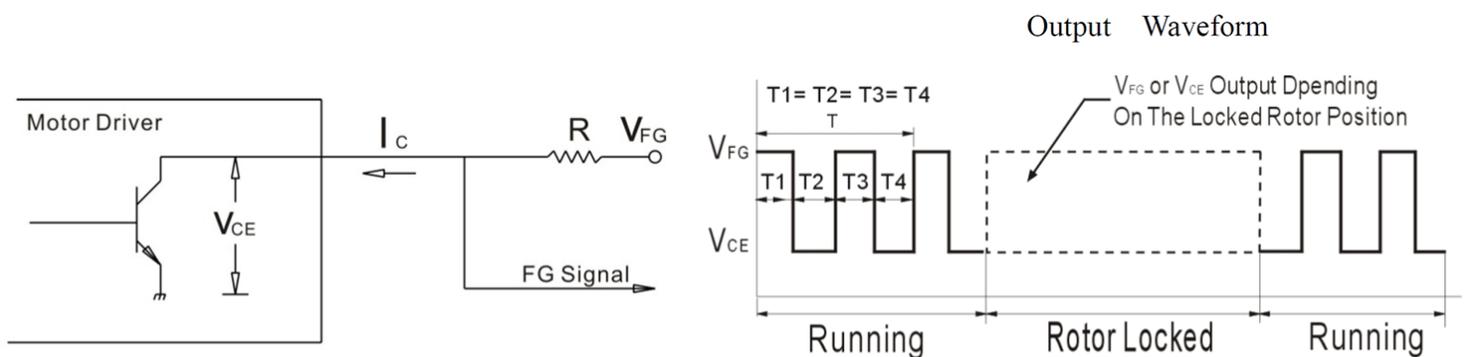


Figure 2: Push Pin Illustration

Fan Circuit Schematic



Output Type : Open Collect

$V_{CE(sat)}=0.5V(\text{Max.})$

$I_C=5mA(\text{Max.})$

$V_{FG}=\text{Maxi mum operation voltage}$

$R \geq V_{FG} / I_C$

$N=R.P.M ; T= 60/N (\text{Sec.}) ; FG=1/T*2 (\text{Hz}) ; N=FG*30$

Figure 3: SZ05S Signal Circuit Schematic