



達鉅電子股份有限公司  
REGO ELECTRONICS INC.

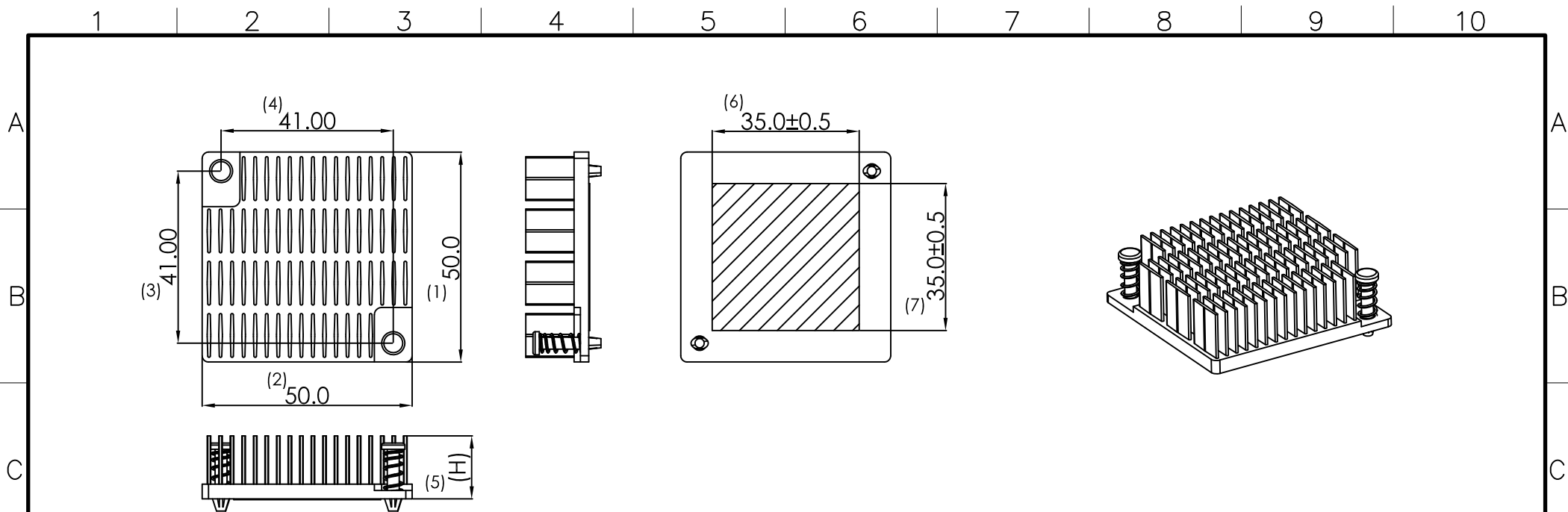
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## APPROVAL SHEET

BRAND	REGO
PART NUMBER	FP2H50004-xx35BA-100T-A+PCM
DESCRIPTION	HEAT SINK ASSEMBLY 50 x 50 x (15~40)mm
CUSTOMER	
CUSTOMER P/N	

### AUTHORIZED SIGNATURES

AUTHORIZED SIGNATURES			
NAME			
DATE			



NOTES:

PART NAME / NUMBER	HEIGHT(H)	FORGED FIN	PCS	PUSH PINS	PCS	PHASE CHANGE THERMAL PAD	PCS
FP2H50004-1535BA-100T-A+PCM	15	FP2H50004-1535BA-1	1	1-1700030925	2	PCM4988 35x35x0.2	1
FP2H50004-2035BA-100T-A+PCM	20	FP2H50004-2035BA-1					
FP2H50004-2535BA-100T-A+PCM	25	FP2H50004-2535BA-1					
FP2H50004-3035BA-100T-A+PCM	30	FP2H50004-3035BA-1					
FP2H50004-3535BA-100T-A+PCM	35	FP2H50004-3535BA-1					
FP2H50004-4035BA-100T-A+PCM	40	FP2H50004-4035BA-1					

COMPRESSION REFERENCE

CONDITIONED	H+T = 2.9mm IC HEIGHT (H) PCB THICKNESS (T)	H+T = 3.4mm IC HEIGHT (H) PCB THICKNESS (T)	H+T = 3.9mm IC HEIGHT (H) PCB THICKNESS (T)	H+T = 4.4mm IC HEIGHT (H) PCB THICKNESS (T)
APPLIED FORCE (3~5 lbs)	3.7 lbs	4.19 lbs	4.69 lbs	5.19 lbs

PROPRIETARY NOTE  
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PROJECT	APPROVED	MATERIAL	DATE	.X° ± 3°
	CHRIS		N/A	2023/05/12
TITLE	CHECKED	FINISH	SCALE	.XX ± 0.20
HEAT SINK ASSEMBLY 50 x 50 x (15~40)mm	LEVI		N/A	1:1
PART NO	DRAWN	UNITS	REV	SHEET
FP2H50004-xx35BA-100T-A+PCM	VIC	mm	A	1 OF 1

1 2 3 4 5 6 7 8 9 10

A

B

C

D

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A

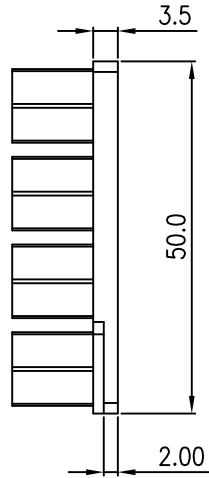
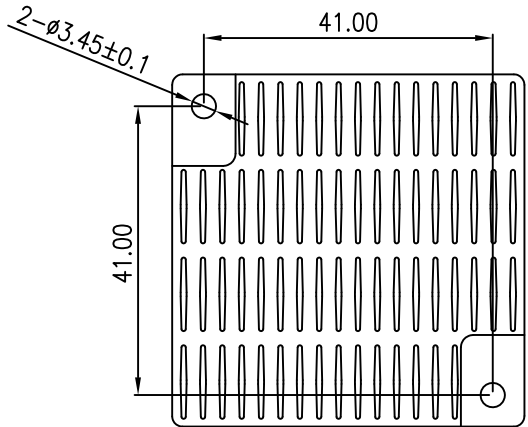
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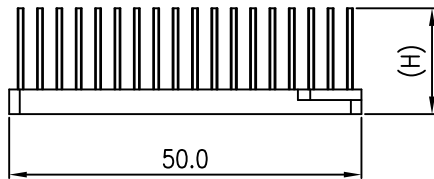
E

F



NOTES:

PART NAME / NUMBER	HEIGHT(H)
FP2H50004-0635BA-1	6
FP2H50004-0835BA-1	8
FP2H50004-1035BA-1	10
FP2H50004-1535BA-1	15
FP2H50004-2035BA-1	20
FP2H50004-2535BA-1	25
FP2H50004-3035BA-1	30
FP2H50004-3535BA-1	35
FP2H50004-4035BA-1	40



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PROJECT	APPROVED CHRIS	MATERIAL AL1070	DATE 2023/05/12	.X° ± 3°
TITLE FORGED FIN 50 x 50 x (6~40)mm	CHECKED LEVI	FINISH BLACK MATTE ANODIZED	SCALE 1:1	.X ± 0.30
PART NO FP2H50004-xx35BA-1	DRAWN VIC	UNITS mm	REV A	.XX ± 0.20 .XXX ± 0.10
				SHEET 1 OF 1

1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10

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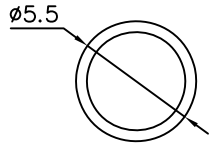
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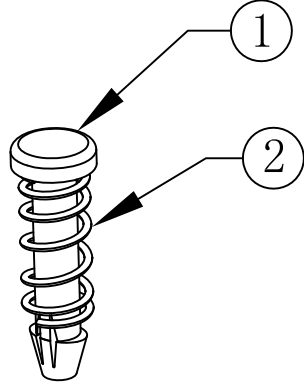
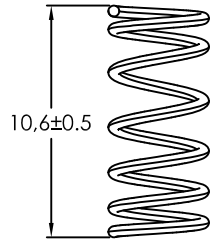
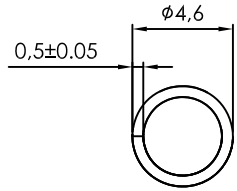
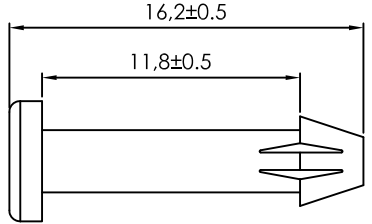
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HOLE IN PCB  $\phi 3.1 \pm 0.05$



ITEM	DESCRIPTION	MATERIAL	FINISH
1	BODY	NYLON 66	WHITE
2	SPRING	PIANO WIRE	NICKEL

ITEM	NUMERICAL VALUE
SPRING DIAMETER D=	4.1 mm
WIRE DIAMETER d=	0.5 mm
TOTAL COIL Q'TY Na=	6
FREE LENGTH L0=	10.6 mm
SPRING COEFFICIENT K=	226.71 g/mm



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PROJECT	APPROVED	MATERIAL	DATE	
	CHRIS	SEE NOTE	2020/10/20	.X° ± 3°
TITLE	CHECKED	FINISH	SCALE	.X ± 0.30
PUSH PIN	LEVI	SEE NOTE	1:1	.XX ± 0.20
PART NO	DRAWN	UNITS	REV	.XXX ± 0.10
1-1700030925	VIC	mm	A	1 OF 1

1 2 3 4 5 6 7 8 9 10

A

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## PCM4988 High Thermal Conductivity Phase Change Material

Honeywell's PCM4988, a highly thermally conductive Phase Change Material (PCM) in pad format, was designed to minimize thermal resistance at interfaces. Based on a novel polymer PCM system, this material exhibits excellent wetting at interfaces during typical operating temperature range, resulting in very low surface contact resistance.

A proprietary filler material provides high thermal conductivity (2.0–5.0 W/m°C ) and a low thermal impedance (<0.20°C cm<sup>2</sup>/W), suitable for high performance IC devices.

### PCM4988 in Convenient Pad Format



\*Stencil printable material is available as PCM4988-SP

### Honeywell TIMs Serve Multiple Applications



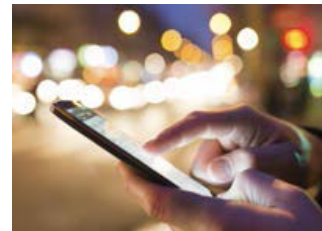
Automotive & Power



IT/Enterprise



Telecommunications



Consumer Electronics



## FEATURES & BENEFITS

- High performance filler and polymer technology
- Phase change at 45°C
- Highly conductive filler loading to optimize performance
- Superior handling and reworkability
- Superior reliable thermal performance
- Excellent thermal capability to fit different needs

# PCM4988 Technical Information

Physical Properties	Unit	Test Method	PCM4988
Thermal Conductivity	W/m·K	ASTM D5470	2.0
Thermal Impedance @ no shim (Typical Value)	°C -cm <sup>2</sup> /W	ASTM D5470 Modified	0.14
Specific Gravity		ASTM D374	2.2
Viscosity (Typical Value)	Pa·s @2 1/s, 25°C	RehometerHON	NA
Volume Resistivity	Ω·cm	ASTM D257-700	8.2x10 <sup>14</sup>
Thickness Range	mm		0.20-1.00

## STORAGE CONDITION

Refer to product label.

## THERMAL IMPEDANCE POST RELIABILITY

(No shim @ 40psi)

End of Line

0.14 °C-cm<sup>2</sup>/W

Temperature Cycle "B"

0.10 °C-cm<sup>2</sup>/W

(-55°C to +125°C , 1000 cycles)

## Product Use

Clamping pressure and temperature are suggested to achieve a minimum bond line thickness of the thermal interface material, typically less than 1.5 mil (0.038mm) for best thermal performance.

## More Honeywell TIMs

PCM4988 is part of Honeywell's TIM Solutions family of phase change materials. Whatever the thermal challenge, we offer a TIM product that provides just the right characteristics for your application. Find out more about:

PTM7000 Series

PTM6000 Series

PTM5000 Series

PCM45F Series

Hybrid Series

LTM Series By

visiting: [electronicmaterials.com](http://electronicmaterials.com)



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DS.0318Rev3

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Authorized Distributor

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