



達鉅電子股份有限公司  
REGO ELECTRONICS INC.

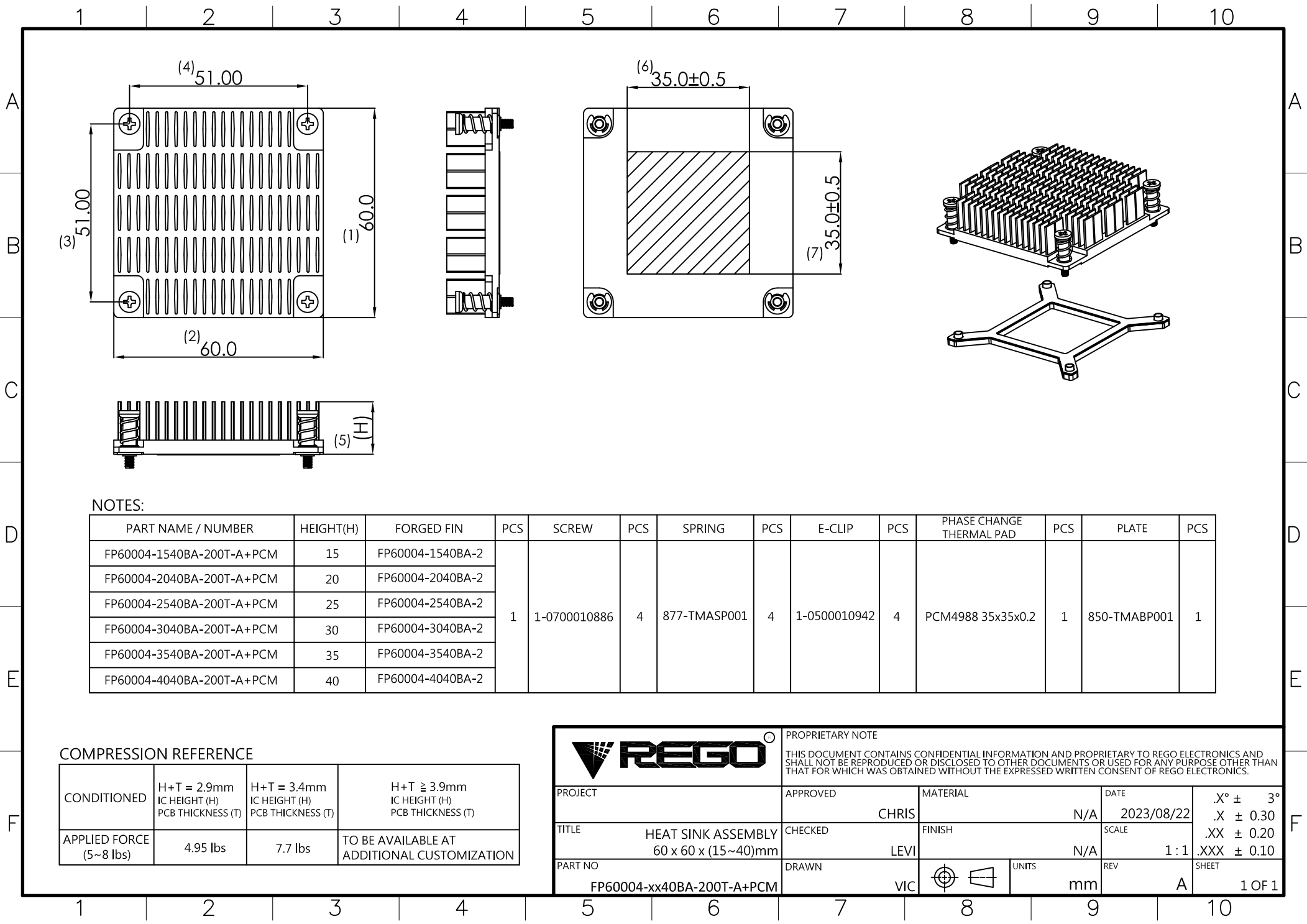
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TEL: 886-2-2643-6558 FAX: 886-2-2643-6118 www.regothermal.com

## APPROVAL SHEET

BRAND	REGO
PART NUMBER	FP60004-xx40BA-200T-A+PCM
DESCRIPTION	HEAT SINK ASSEMBLY 60 x 60 x (15~40)mm
CUSTOMER	
CUSTOMER P/N	

### AUTHORIZED SIGNATURES

NAME			
DATE			



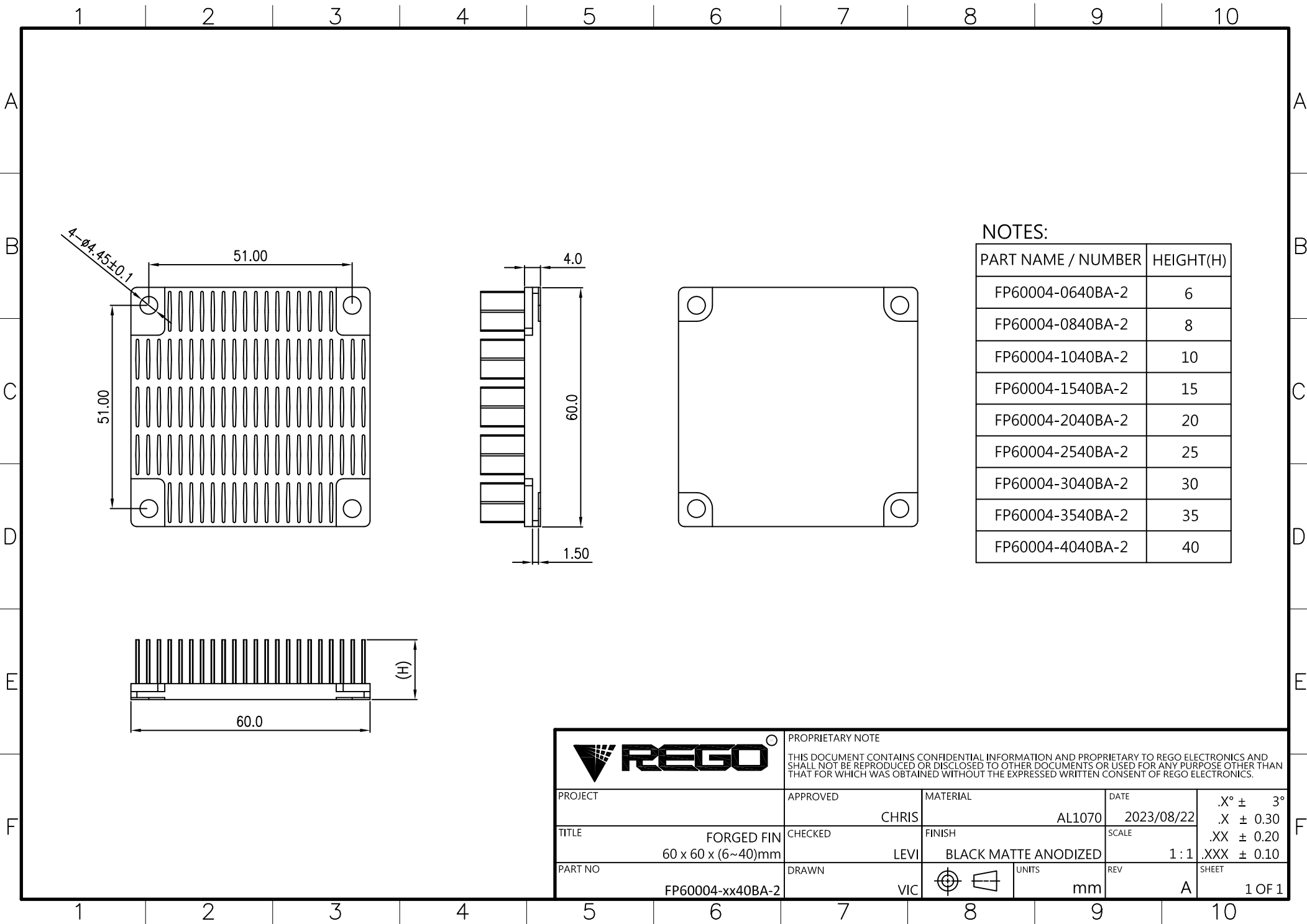
NOTES:

PART NAME / NUMBER	HEIGHT(H)	FORGED FIN	PCS	SCREW	PCS	SPRING	PCS	E-CLIP	PCS	PHASE CHANGE THERMAL PAD	PCS	PLATE	PCS
FP60004-1540BA-200T-A+PCM	15	FP60004-1540BA-2	1	1-0700010886	4	877-TMASP001	4	1-0500010942	4	PCM4988 35x35x0.2	1	850-TMABP001	1
FP60004-2040BA-200T-A+PCM	20	FP60004-2040BA-2											
FP60004-2540BA-200T-A+PCM	25	FP60004-2540BA-2											
FP60004-3040BA-200T-A+PCM	30	FP60004-3040BA-2											
FP60004-3540BA-200T-A+PCM	35	FP60004-3540BA-2											
FP60004-4040BA-200T-A+PCM	40	FP60004-4040BA-2											

COMPRESSION REFERENCE


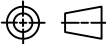
CONDITIONED	H+T = 2.9mm IC HEIGHT (H) PCB THICKNESS (T)	H+T = 3.4mm IC HEIGHT (H) PCB THICKNESS (T)	H+T ≥ 3.9mm IC HEIGHT (H) PCB THICKNESS (T)
APPLIED FORCE (5~8 lbs)	4.95 lbs	7.7 lbs	TO BE AVAILABLE AT ADDITIONAL CUSTOMIZATION

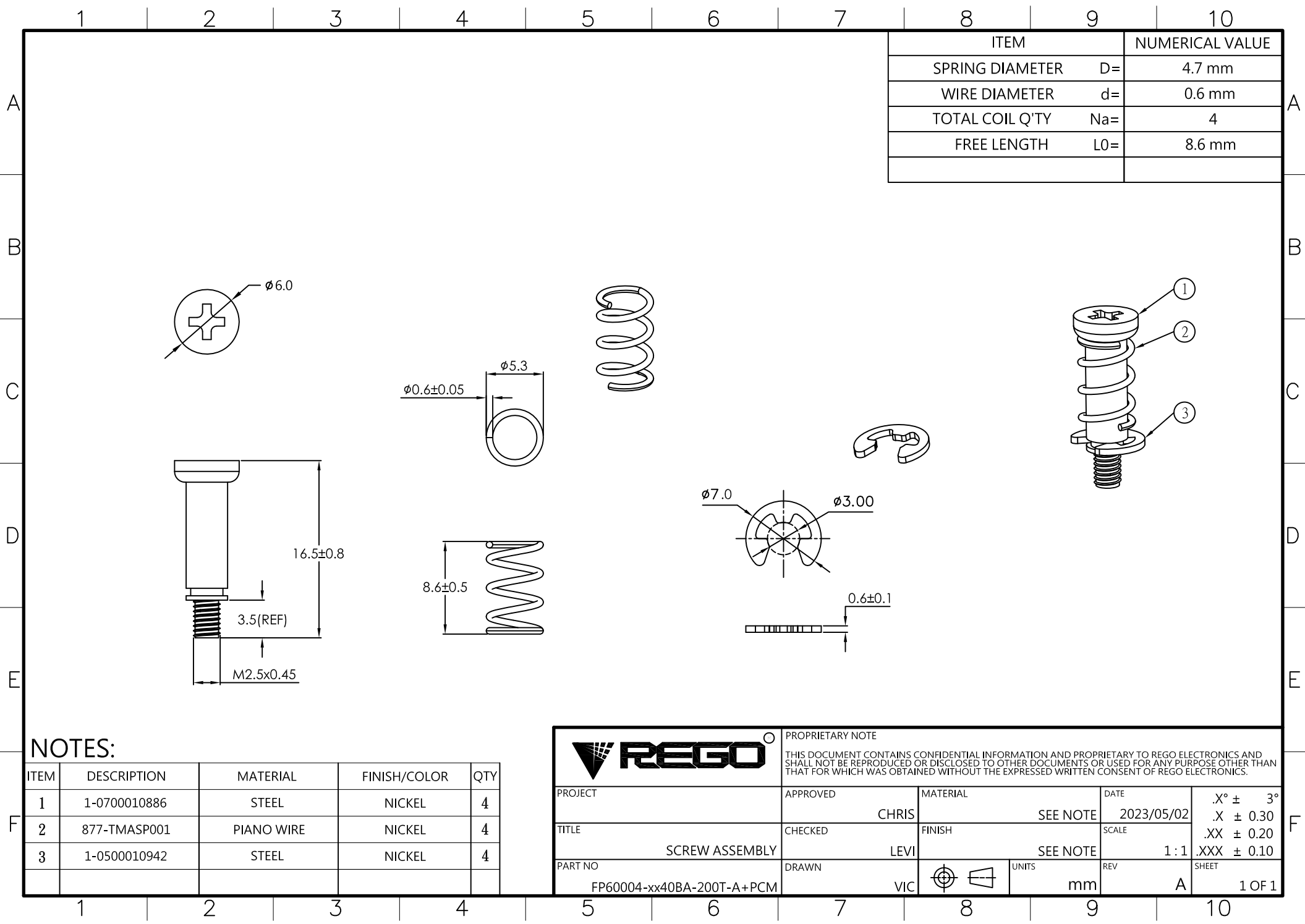
		PROPRIETARY NOTE THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION AND PROPRIETARY TO REGO ELECTRONICS AND SHALL NOT BE REPRODUCED OR DISCLOSED TO OTHER DOCUMENTS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF REGO ELECTRONICS.			
PROJECT	APPROVED	MATERIAL	DATE	.X° ± 3°	
TITLE HEAT SINK ASSEMBLY 60 x 60 x (15~40)mm	CHRIS	N/A	2023/08/22	.X ± 0.30	
	CHECKED	FINISH	SCALE	.XX ± 0.20	
PART NO FP60004-xx40BA-200T-A+PCM	LEVI	N/A	1:1	.XXX ± 0.10	
	DRAWN	UNITS	REV	SHEET	
VIC		mm	A	1 OF 1	



NOTES:

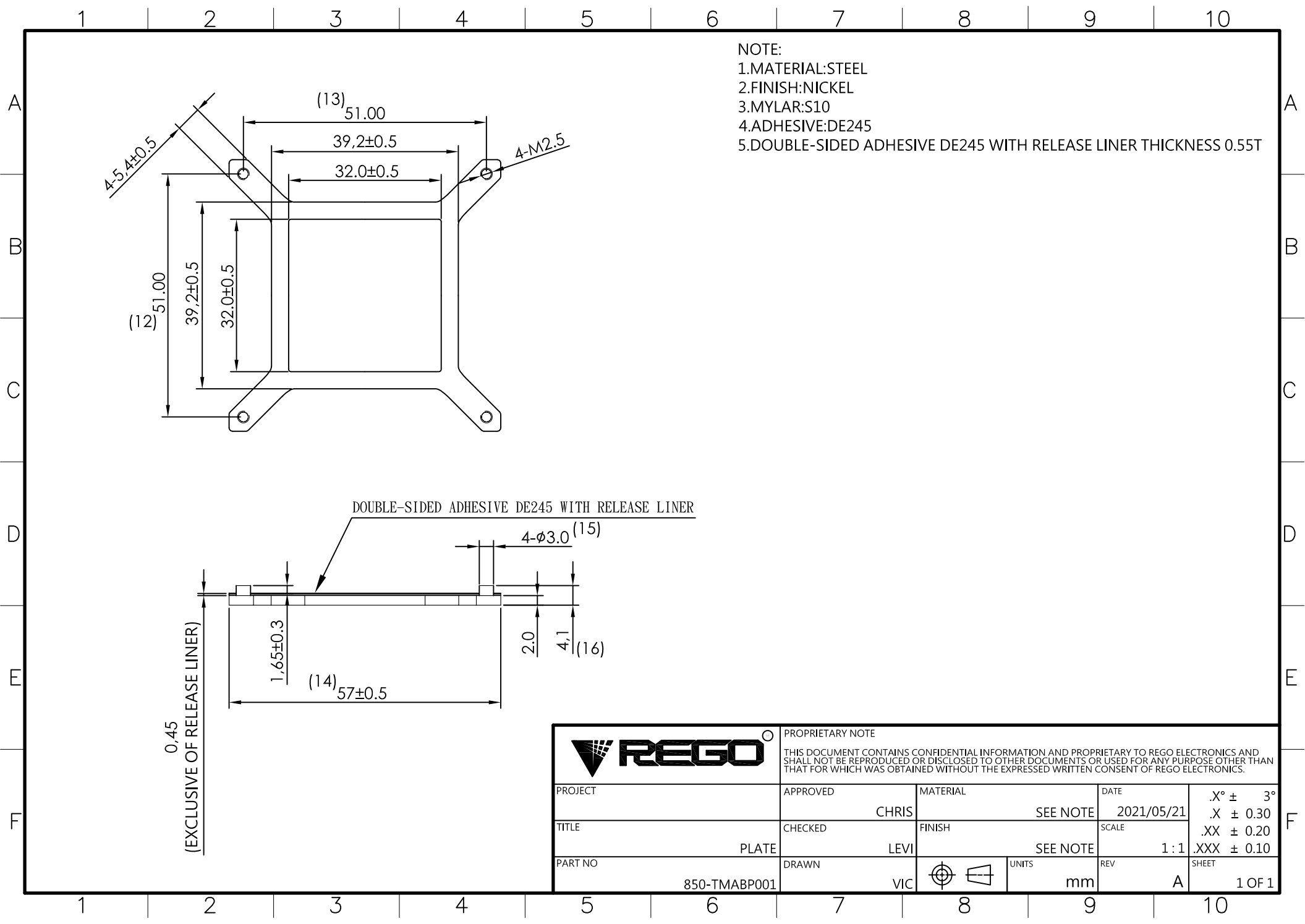
PART NAME / NUMBER	HEIGHT(H)
FP60004-0640BA-2	6
FP60004-0840BA-2	8
FP60004-1040BA-2	10
FP60004-1540BA-2	15
FP60004-2040BA-2	20
FP60004-2540BA-2	25
FP60004-3040BA-2	30
FP60004-3540BA-2	35
FP60004-4040BA-2	40

		PROPRIETARY NOTE THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION AND PROPRIETARY TO REGO ELECTRONICS AND SHALL NOT BE REPRODUCED OR DISCLOSED TO OTHER DOCUMENTS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF REGO ELECTRONICS.			
PROJECT	APPROVED	MATERIAL	DATE	<div>.X° ± 3° .X ± 0.30 .XX ± 0.20 .XXX ± 0.10</div>	
TITLE	CHECKED	FINISH	SCALE		
PART NO	DRAWN	UNITS	REV		
FORGED FIN 60 x 60 x (6~40)mm		CHRIS	AL1070	1 : 1	A
FP60004-xx40BA-2		LEVI	BLACK MATTE ANODIZED	mm	1 OF 1
		VIC			



NOTES:

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PROJECT	APPROVED	MATERIAL	DATE	.X° ± 3°
	CHRIS	SEE NOTE	2023/05/02	.X ± 0.30
TITLE	CHECKED	FINISH	SCALE	.XX ± 0.20
SCREW ASSEMBLY	LEVI	SEE NOTE	1:1	.XXX ± 0.10
PART NO	DRAWN	UNITS	REV	SHEET
FP60004-xx40BA-200T-A+PCM	VIC	mm	A	1 OF 1



NOTE:  
1.MATERIAL:STEEL  
2.FINISH:NICKEL  
3.MYLAR:S10  
4.ADHESIVE:DE245  
5.DOUBLE-SIDED ADHESIVE DE245 WITH RELEASE LINER THICKNESS 0.55t


DOUBLE-SIDED ADHESIVE DE245 WITH RELEASE LINER

0,45  
(EXCLUSIVE OF RELEASE LINER)

1,65±0.3  
(14) 57±0.5

4-Ø3.0 (15)

2.0  
4.1 (16)

		PROPRIETARY NOTE		
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PROJECT	APPROVED	MATERIAL	DATE	.X° ± 3°
	CHRIS	SEE NOTE	2021/05/21	.X ± 0.30
TITLE	CHECKED	FINISH	SCALE	.XX ± 0.20
PLATE	LEVI	SEE NOTE	1:1	.XXX ± 0.10
PART NO	DRAWN	UNITS	REV	SHEET
850-TMABP001	VIC	mm	A	1 OF 1

## 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 ( $<0.20^{\circ}\text{C cm}^2/\text{W}$ ), 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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OUR COMMITMENT TO SUSTAINABILITY

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Authorized Distributor

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