A great diversity of interconnect & thermal solutions

達鉅電子股份有限公司
REGO ELECTRONICS INC.

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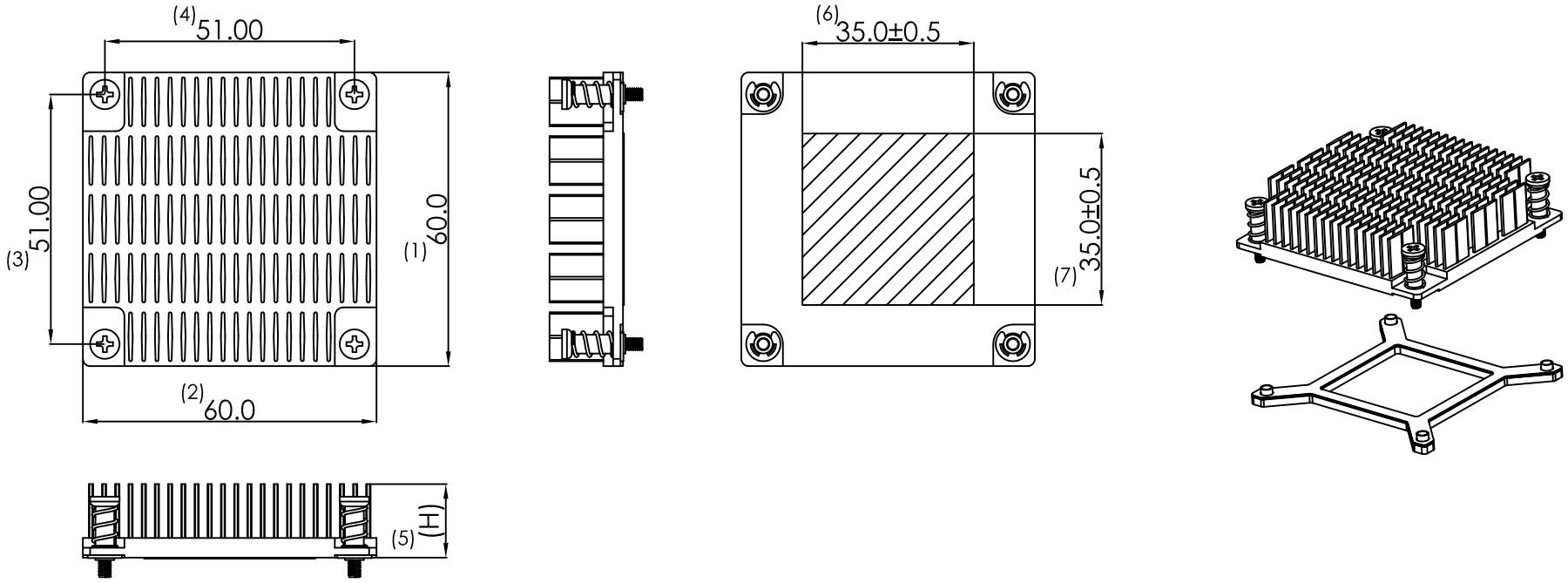
APPROVAL SHEET

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:

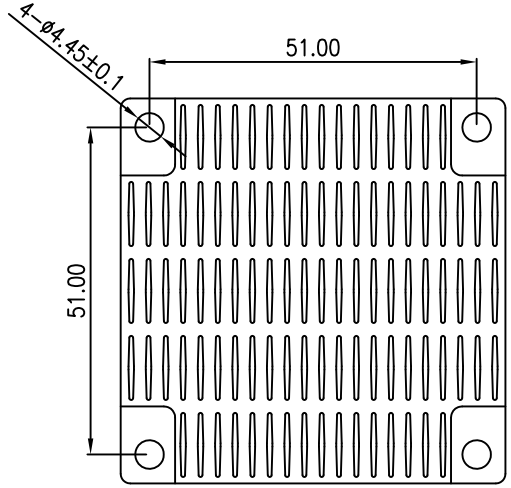
PART NAME / NUMBER	HEIGHT(H)	FORGED FIN	PCS	SCREW	PCS	SPRING	PCS	E-CLIP	PCS	PHASE CHANGE THERMAL PAD	PCS	PLATE	PCS
FP60004-1540BA-200T-A+PCM	15	FP60004-1540BA-2	1	1-0700010886	4	877-TMASP001	4	1-0500010942	4	PCM4988 35x35x0.2	1	850-TMABP001	1
FP60004-2040BA-200T-A+PCM	20	FP60004-2040BA-2											
FP60004-2540BA-200T-A+PCM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

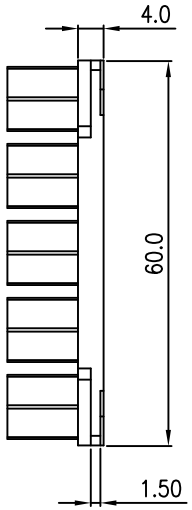
COMPRESSION REFERENCE

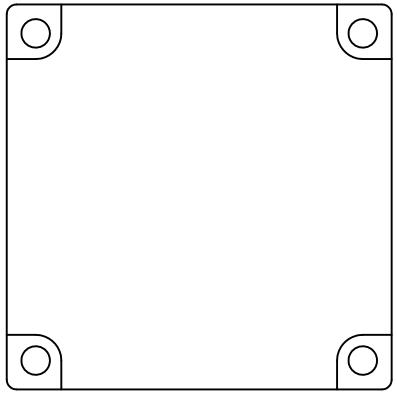
CONDITIONED	H+T = 2.9mm IC HEIGHT (H) PCB THICKNESS (T)	H+T = 3.4mm IC HEIGHT (H) PCB THICKNESS (T)	H+T ≧ 3.9mm IC HEIGHT (H) PCB THICKNESS (T)
APPLIED FORCE (5~8 lbs)	4.95 lbs	7.7 lbs	TO BE AVAILABLE AT ADDITIONAL CUSTOMIZATION

REGO

PROJECT	APPROVED: CHRIS	MATERIAL: N/A	DATE: 2023/08/22	.X° ± 3°	
TITLE: HEAT SINK ASSEMBLY 60 x 60 x (15~40)mm	CHECKED: LEVI	FINISH: N/A	SCALE: 1 : 1	.X ± 0.30 .XX ± 0.20 .XXX ± 0.10	
PART NO: FP60004-xx40BA-200T-A+PCM	DRAWN: VIC	UNITS: mm	REV: A	SHEET: 1 OF 1	







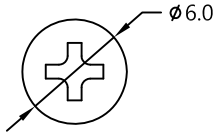
NOTES:

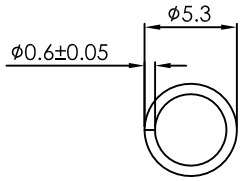
PART NAME / NUMBER	HEIGHT(H)
FP60004-0640BA-2	6
FP60004-0840BA-2	8
FP60004-1040BA-2	10
FP60004-1540BA-2	15
FP60004-2040BA-2	20
FP60004-2540BA-2	25
FP60004-3040BA-2	30
FP60004-3540BA-2	35
FP60004-4040BA-2	40

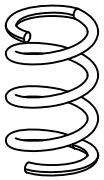
REGO

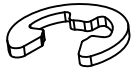
PROJECT	APPROVED: CHRIS	MATERIAL: AL1070	DATE: 2023/08/22	.X° ± 3°
TITLE: FORGED FIN 60 x 60 x (6~40)mm	CHECKED: LEVI	FINISH: BLACK MATTE ANODIZED	SCALE: 1 : 1	.X ± 0.30 .XX ± 0.20 .XXX ± 0.10
PART NO: FP60004-xx40BA-2	DRAWN: VIC	UNITS: mm	REV: A	SHEET: 1 OF 1

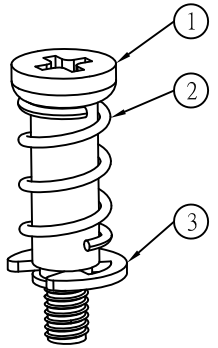
ITEM		NUMERICAL VALUE
SPRING DIAMETER	D=	4.7 mm
WIRE DIAMETER	d=	0.6 mm
TOTAL COIL Q'TY	Na=	4
FREE LENGTH	L0=	8.6 mm

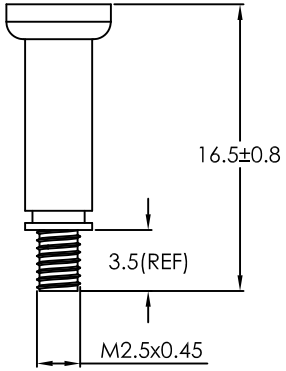


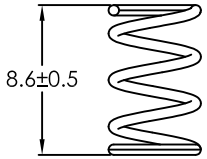


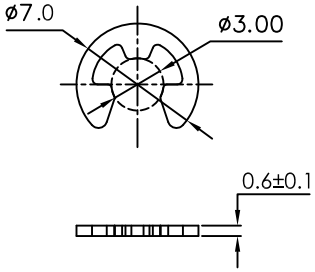










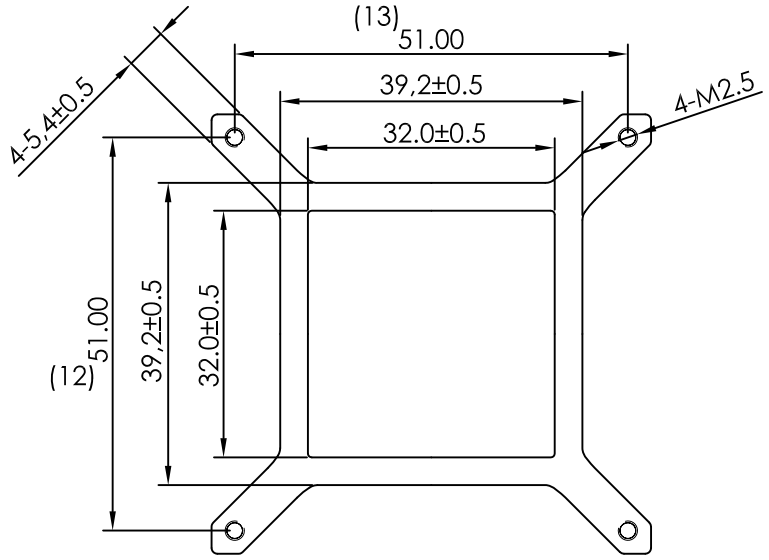


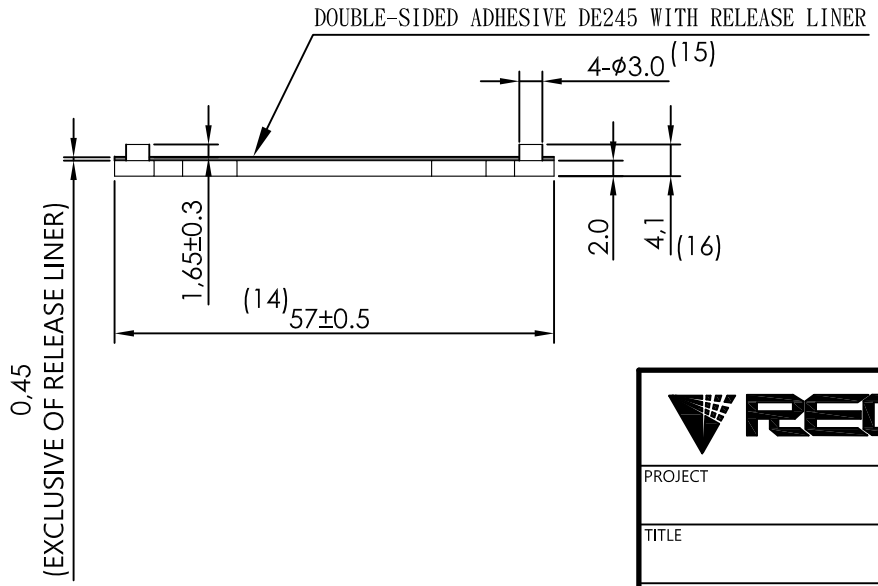
NOTES:

ITEM	DESCRIPTION	MATERIAL	FINISH/COLOR	QTY
1	1-0700010886	STEEL	NICKEL	4
2	877-TMASP001	PIANO WIRE	NICKEL	4
3	1-0500010942	STEEL	NICKEL	4

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





PROJECT	APPROVED: CHRIS	MATERIAL: SEE NOTE	DATE: 2021/05/21	.X° ± 3° / .X ± 0.30 / .XX ± 0.20 / .XXX ± 0.10
TITLE: PLATE	CHECKED: LEVI	FINISH: SEE NOTE	SCALE: 1 : 1	
PART NO: 850-TMABP001	DRAWN: VIC	UNITS: mm	REV: A	SHEET: 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°C cm^2/W), suitable for high performance IC devices.

PCM4988 in Convenient Pad Format

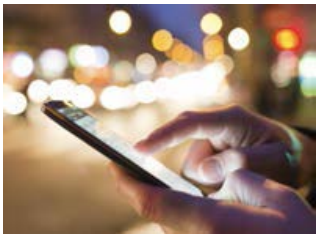
*Stencil printable material is available as PCM4988-SP

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^2/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^{14}
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^2/W
Temperature Cycle "B" (-55°C to +125°C , 1000 cycles)	0.10 °C-cm^2/W

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

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