



達鉅電子股份有限公司
REGO ELECTRONICS INC.

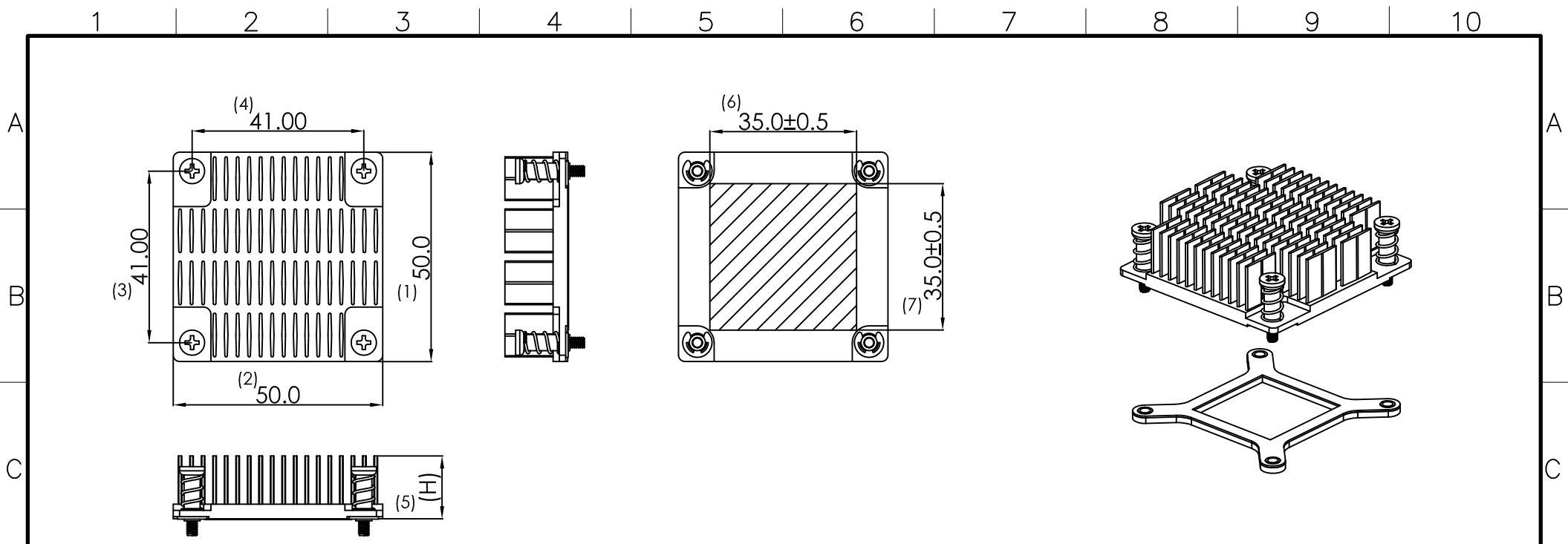
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APPROVAL SHEET

| | |
|--------------|---|
| BRAND | REGO |
| PART NUMBER | FP50004-xx35BA-200T-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 | SCREW | PCS | SPRING | PCS | E-CLIP | PCS | PHASE CHANGE THERMAL PAD | PCS | PLATE | PCS |
|---------------------------|-----------|------------------|-----|--------------|-----|--------------|-----|--------------|-----|--------------------------|-----|--------------|-----|
| FP50004-1535BA-200T-A+PCM | 15 | FP50004-1535BA-2 | 1 | 1-0700010886 | 4 | 877-TMASP001 | 4 | 1-0500010942 | 4 | PCM4988 35x35x0.2 | 1 | 850-TMABP005 | 1 |
| FP50004-2035BA-200T-A+PCM | 20 | FP50004-2035BA-2 | | | | | | | | | | | |
| FP50004-2535BA-200T-A+PCM | 25 | FP50004-2535BA-2 | | | | | | | | | | | |
| FP50004-3035BA-200T-A+PCM | 30 | FP50004-3035BA-2 | | | | | | | | | | | |
| FP50004-3535BA-200T-A+PCM | 35 | FP50004-3535BA-2 | | | | | | | | | | | |
| FP50004-4035BA-200T-A+PCM | 40 | FP50004-4035BA-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 |

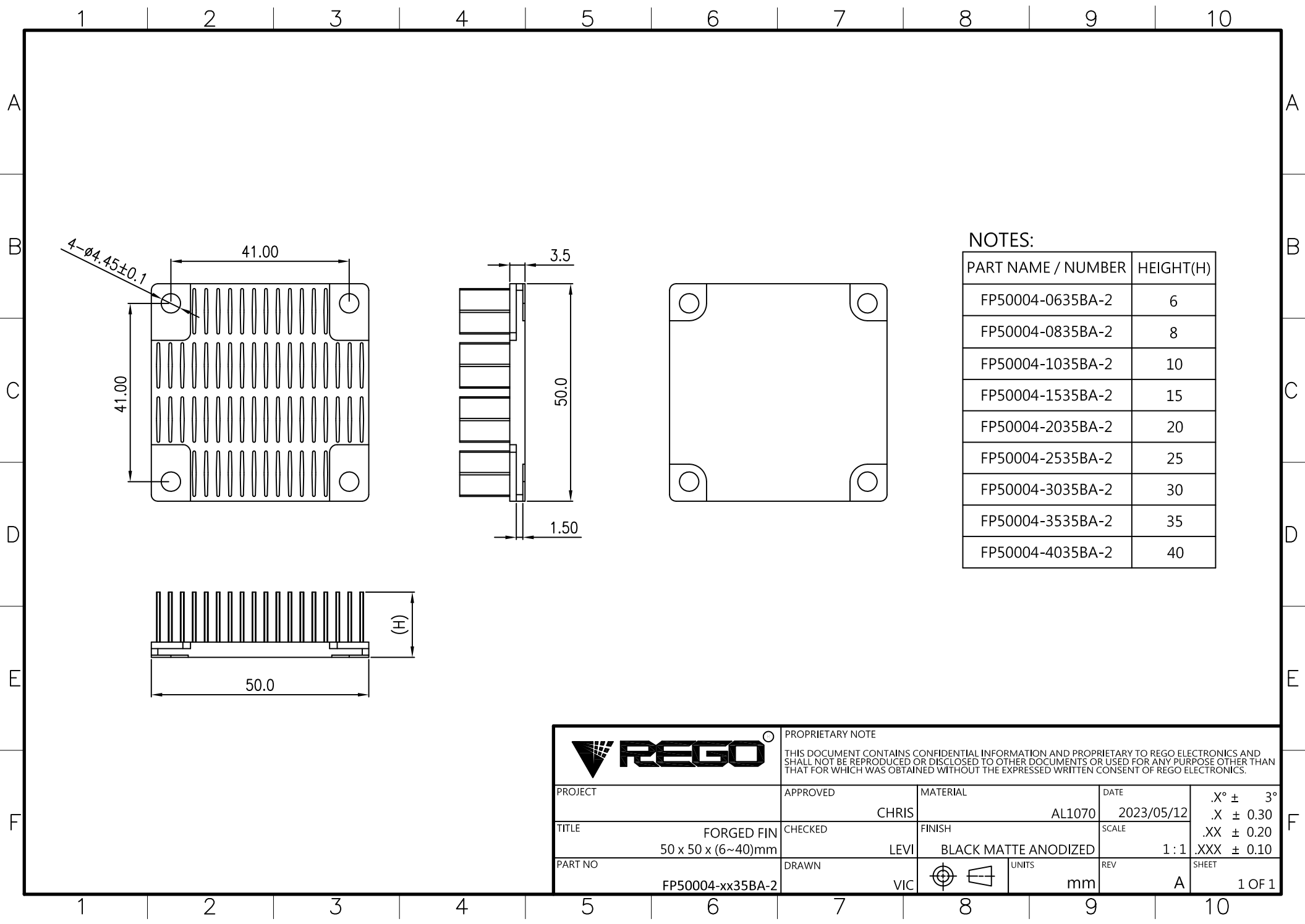


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| | | | |
|---|----------|----------|------------|
| PROJECT | APPROVED | MATERIAL | DATE |
| | CHRIS | N/A | 2023/05/12 |
| TITLE | CHECKED | FINISH | SCALE |
| HEAT SINK ASSEMBLY 50 x 50 x (15~40)mm | LEVI | N/A | 1:1 |
| PART NO | DRAWN | UNITS | REV |
| FP50004-xx35BA-200T-A+PCM | VIC | mm | A |

.X° ± 3°
.X ± 0.30
.XX ± 0.20
.XXX ± 0.10

SHEET
1 OF 1



NOTES:

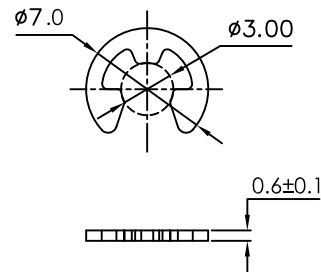
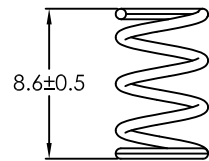
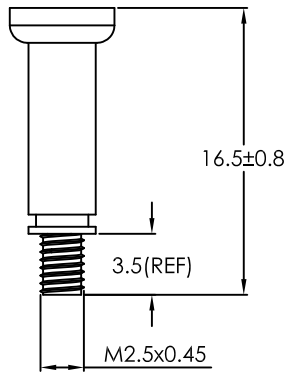
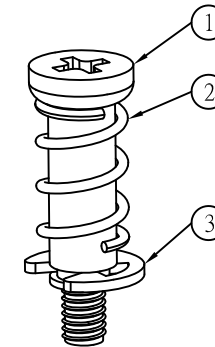
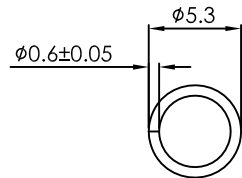
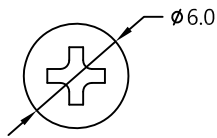
| PART NAME / NUMBER | HEIGHT(H) |
|--------------------|-----------|
| FP50004-0635BA-2 | 6 |
| FP50004-0835BA-2 | 8 |
| FP50004-1035BA-2 | 10 |
| FP50004-1535BA-2 | 15 |
| FP50004-2035BA-2 | 20 |
| FP50004-2535BA-2 | 25 |
| FP50004-3035BA-2 | 30 |
| FP50004-3535BA-2 | 35 |
| FP50004-4035BA-2 | 40 |

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| | | | | |
|----------------------------------|----------|----------------------|------------|-------------|
| PROJECT | APPROVED | MATERIAL | DATE | |
| | CHRIS | AL1070 | 2023/05/12 | .X° ± 3° |
| TITLE | CHECKED | FINISH | SCALE | .XX ± 0.30 |
| FORGED FIN 50 x 50 x (6~40)mm | LEVI | BLACK MATTE ANODIZED | 1:1 | .XXX ± 0.10 |
| PART NO | DRAWN | | UNITS | SHEET |
| FP50004-xx35BA-2 | VIC | mm | A | 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 |



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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 |
| FP50004-xx35BA-200T-A+PCM | VIC | mm | A | 1 OF 1 |

1 2 3 4 5 6 7 8 9 10

A

B

C

D

E

F

A

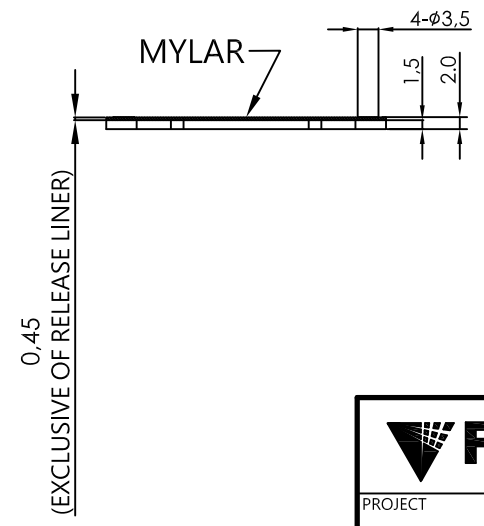
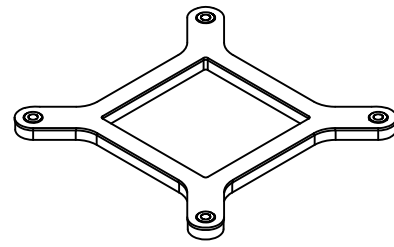
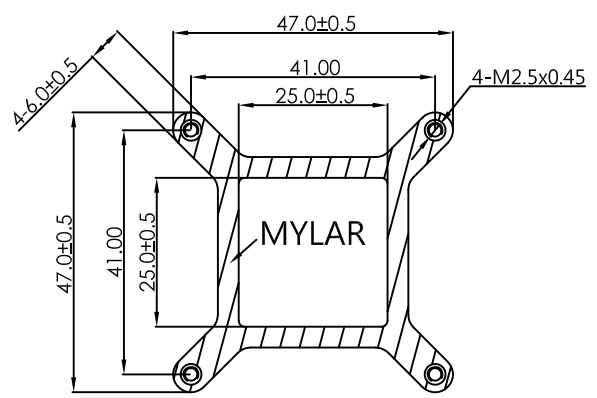
B

C

D

E

F



NOTE:
 1.MATERIAL:STEEL
 2.FINISH:NICKEL
 3.MYLAR:S10
 4.ADHESIVE:DE245

| | | | | | | |
|---------|--------------|---|----------|----------|--|--------|
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| | | PROJECT | APPROVED | MATERIAL | DATE | |
| TITLE | | CHECKED | FINISH | SCALE | .X° ± 3° .X ± 0.30 .XX ± 0.20 .XXX ± 0.10 | |
| PLATE | | LEVI | SEE NOTE | 1:1 | | |
| PART NO | 850-TMABP005 | DRAWN | VIC | UNITS | REV | SHEET |
| | | | | mm | A | 1 OF 1 |

1 2 3 4 5 6 7 8 9 10

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 cm²/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



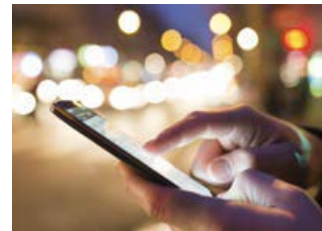
Automotive & Power



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-cm²/W

Temperature Cycle "B"

0.10 °C-cm²/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



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