



科昇 科技 有限 公司
Global WIN Technology Co., Ltd.
5F,NO.31,ALLEY 66,JUI-KUANG RD.,NEI-HU,TAIPEI,TAIWAN.R.O.C.
TEL:886-2-2795-6311 FAX:886-2-27955499

Product Sheets for Approval

Model No.
CAK5-88T

- 1. Specification**
- 2. Specification & Dimension**
Heat Sink / Clip / Fan
- 3. Test Reports**

Thermal Performance

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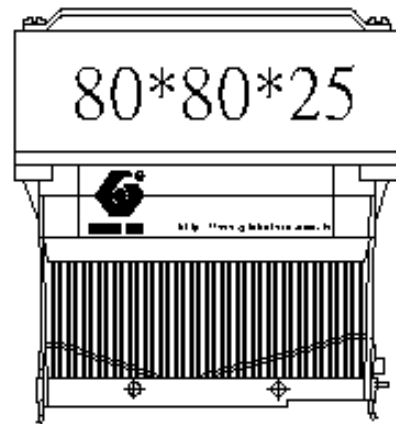
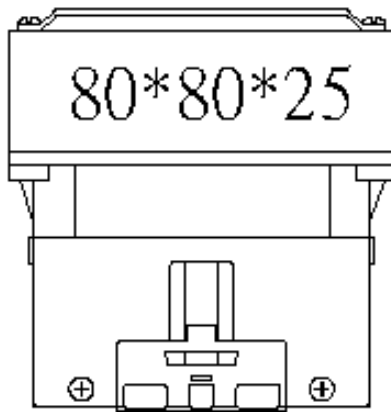
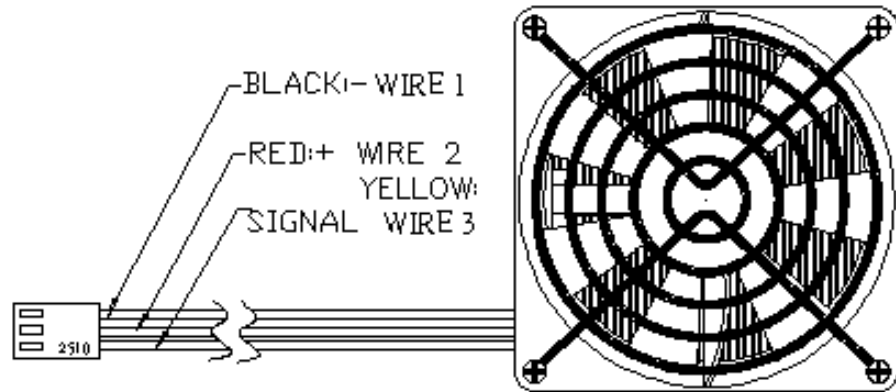
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Specification

Part Number :	CAK5-88T	
Fan (Per Fan)		
Sensor Temperature	30°C	38°C
Operation Voltage	DC 10.2 ~ 13.8V	
Rated Voltage	DC12 V	
Input Current	0.3A MAX.	0.4A MAX.
Input Power	3.6W MAX.	4.8W MAX.
Bearing System	One Ball One Sleeve Bearing	
Fan Speed(RPM)	2800±15%	4000±15%
Max. Air Delivery(CFM)	38±15%	55.2±15%
Noise Level	31.2 ± 2dBA	40.9 ± 2dBA
Fan Safety	UL Approved	
Fan with RPM signal output	YES	
Heatsink		
Dimension	70 * 66 * 35 mm	
Material	COPPER 1100	
Mounting Kit		
Retention Clip	Steel SK7 (Quality Material Clip)	
Thermal Interface	High thermal conductive interface	
Material	GW101/GW103	
Connector	Molex 2510 / 2695 3Pin	



DIMENSION DRAWING





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Specification & Dimension

HEAT SINK

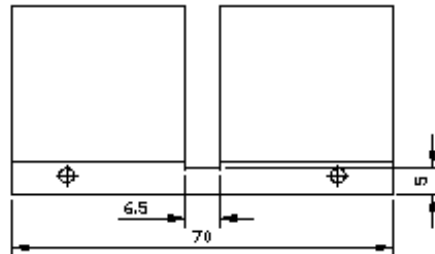
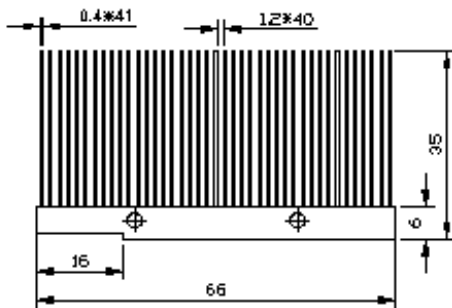
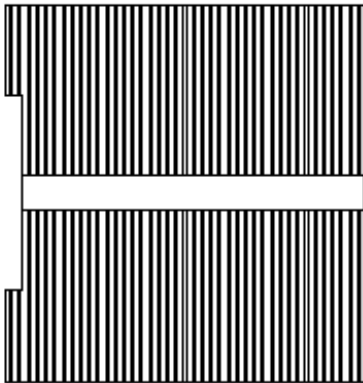
Material : COOPER C1100

Chemistry Ingredient & Temper Designation :

Value	Bi	Sb	As	Fe	Ni	Pb	Sn	S
Specified Values	0.006	0.005	0.005	0.005	0.007	0.006	0.007	0.005

Value	P	Zn	O	Cu
Specified Values	0.006	0.005	0.043	99.9

Value	Hardness(HB)	Crook Test
Specified Values	765	Crook 90° OK



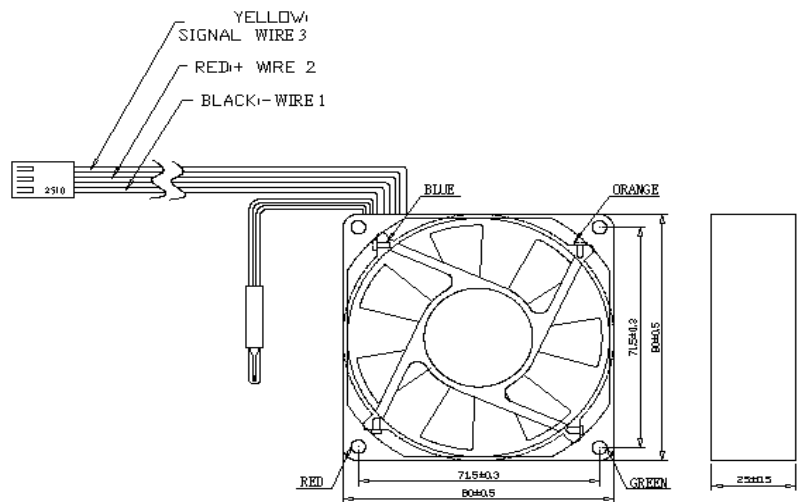


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Specification & Dimension

FAN

Specification	One ball One Sleeve bearing	
Dimensions	80 * 80 * 25 mm	
Sensor Temperature	30 ⁰ C	38 ⁰ C
Rated Speed	2800 ± 15 % RPM	4000 ± 15 % RPM
Air Flow	38 ± 15 % CFM	55.2 ± 15 % CFM
Noise Level	31.2 ± 2dBA	40.9 ± 2dBA
Rated Voltage	DC12 V	
Operating Voltage Range	DC 7 ~ 13.2 V	
Housing / Fan Blade	UL:94V-0 Rating+Fibre Glass	
Max Air-Pressure	3.1 ± 10% mmH ₂ O	7.08 ± 10% mmH ₂ O
Input Current	0.3A MAX.	0.4A MAX.
Input Power	3.6W MAX.	4.8W MAX.
Direction of Rotation	CW VIEW FROM NAME PLATE SIDE	
Life Expectancy	30,000 HOURS CONTINUOUS	
Lead wire	UL 1007,26 AWG "+ POSITIVE----RED" "- NEGATIVE----BLACK" "SENSOR OUTPUT----YELLOW(3 rd WIRE)"	
Operating Temperature	-10 TO +70 ⁰ C	



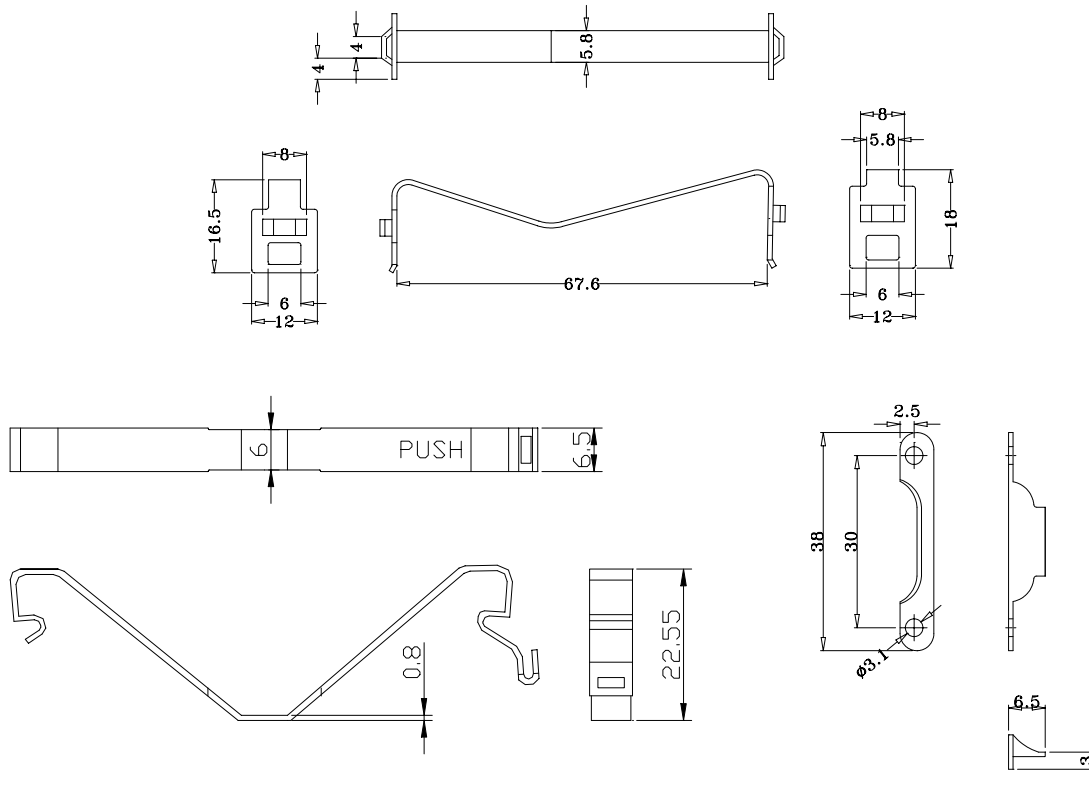
Specification & Dimension

CLIP

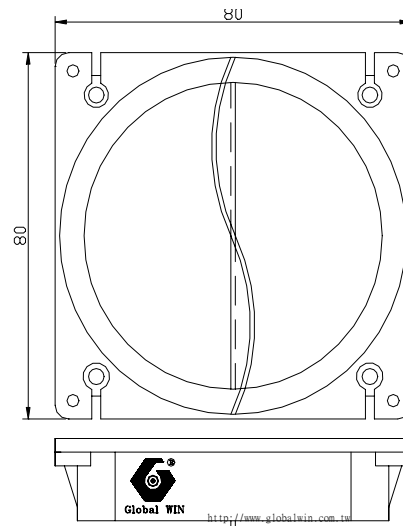
Material : SK7

Physical Characteristics

VALUE	C	Si	Mn	P	S	Ni	Cr	V
	0.65	0.21	0.39	0.009	0.005	0.02	0.14	0.02



Material : ABS





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Specification

THERMAL PAST

Model Type : SILICONE HEAT SINK PAST GW101

COLOR	WHITE
BULK PENETRATION	210 ~ 260
SPECIFIC GRAVITY	2.3 at 25°C
VOLATILE MATTER	after 4h/200°C below 0.5°C
BLEED	after 4h/200°C on vertical surface no bleeding
DIELECTRIC STRENGTH	1.2kv at 0.1mm , ASTM D-149
VOLUME RESISTIVITY	1 * 10 ohm-cm , ASTM D-257
THERMAL CONDUCTIVITY	0.0015 Kcal/cm/sec/°C or 0.63 w/m/°C

Model Type : SILICONE HEAT SINK PAST GW103

COLOR	GRAY
THICKNESS MICRON	130
SPECIFIC GRAVITY	2.5 at 25°C
SOFTENING POINT	48°C
THERMAL RESISTANCE	MICRO FLASH(75um) 0.26 °C cm ² /W
THERMAL CONDUCTIVITY	5.1 w/m/°C
FLAME RESISTANCE	EQUIVALENT TO UL 94 V- 0



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Test Report

Date :2003/3/3

MODEL : CAK5-88T. AMD Athlon XP 3000+ PGA-462 2.167GHZ (42 °C – 85 °C)

PART NUMBER	Fan 80*80*25	Heat Sink	Tape 19*19	*Temperature Tj/Ta/Td	(Q) Watts	* RJa(°C/W)
CAK5-88T	2800RPM	70*66*35 500g	GW103	47.3/10/37.3	74.3	0.502
CAK5-88T	4000RPM	70*66*35 500g	GW103	76.2/42/34.2	74.3	0.46

BS802512HL-03T 2800RPM 38 CFM 31.2db

Rja: Thermal Resistance From Junction To Ambient

Tj: simulate CPU junction temperature

Ta: Ambient temperature at inlet of fan

Td: Temperature Differnce (Td=Tj-Ta)

Heater: Heater To Simulate CPU

Space: Close

Time: 2H.



R&D

業務

總經理