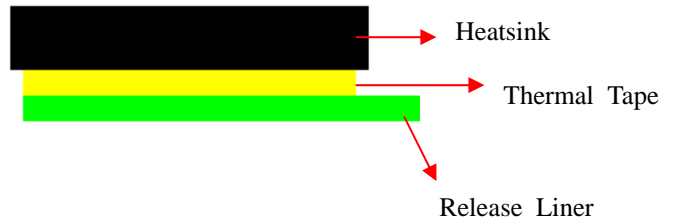
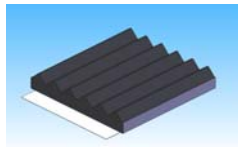
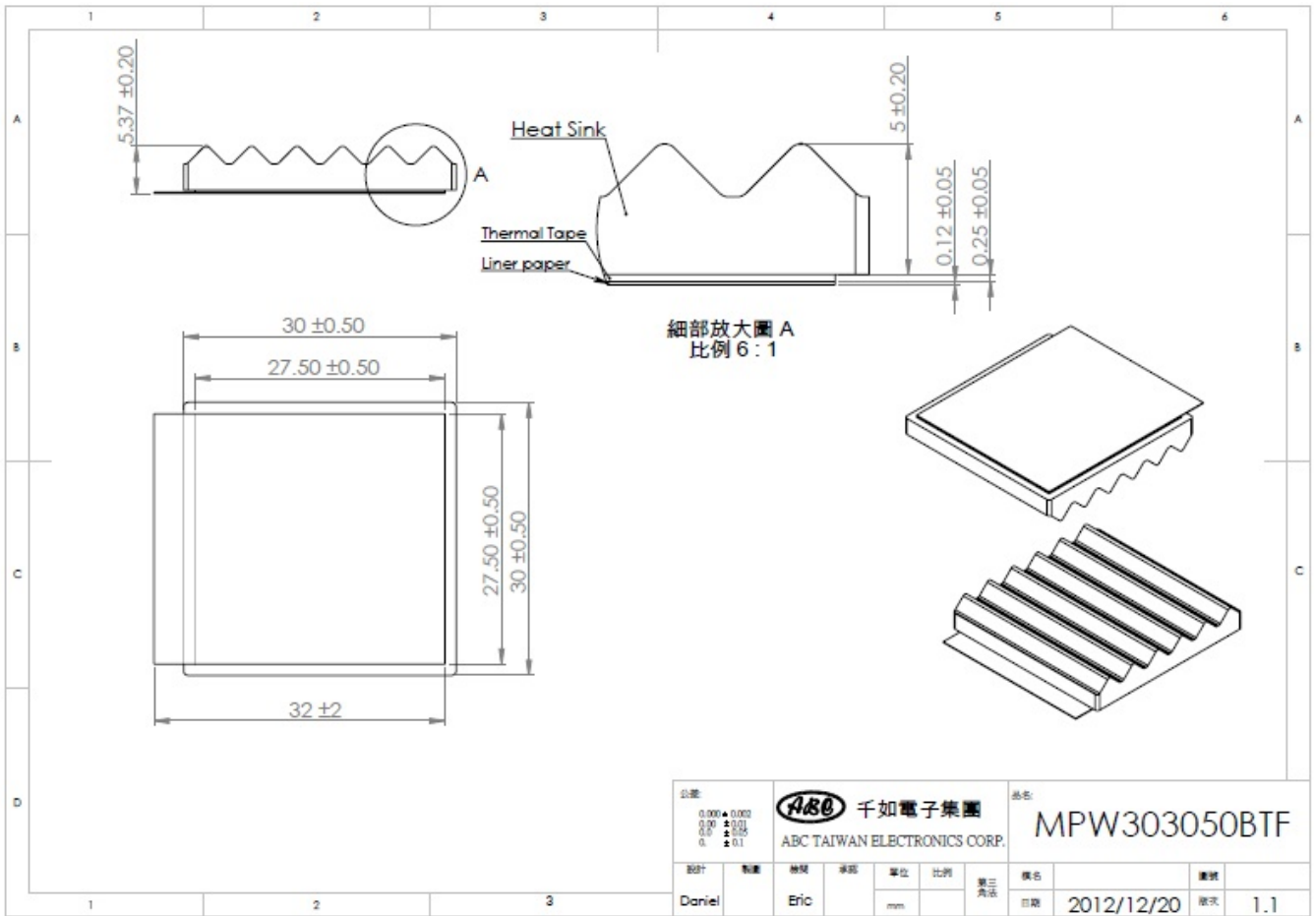


Type Document Revision History

ITEM	Ceramic Heat Sink with Micro-Pores Structure	ABC P/N	MPW303050BTF
		Customer P/N	

Rev	Date	Page	Initiator	Description
1.0	2010/12/27	1~5	Daniel Lee	New
1.1	2011/12/20	1~6	Daniel Lee	1.Update Packing Specification 2.Add The Limitation Card of Appearance Failure
1.2	2012/05/18	1~6	Daniel Lee	1.Update The Limitation Card of Appearance Failure
1.3	2012/12/20	1~6	Daniel Lee	1.Update Drawing Data

Drawing Data



Ceramic Heat Sink Technical Data Sheet

Main features		Item	Unit	Value	Method
Product			Ceramic Heat Sink with Micro-Pores Structure		
Product code			MP-SIC		
Color			Gray		
specific gravity			g/cm ³	2.7	CNS619
Porosity			%	30	CNS619
Water absorption			%	15.77	CNS619
Mechanical properties	Mohs' hardness		N/mm ²	5~6	DIN EN101-1992
	Flexural strength		kgf/cm ²	47.5	CNS12701(1990)
	Bulk density		g/cm ³	1.6~2.0	CNS2893(1969)
	Resistance insulation		Ω	20*10 ⁶	ASTM D257
	Thermal conductivity		w/m-k	5~6	
	Maximum operating temperature		℃	<500	
	Linear thermal expansion coefficient		10 ⁻⁶	4.13	RT~300℃
Chemical composition	Main composition			SiC	80%↑
	composition			AL ₂ O ₃	10%↑
	composition			SiO ₂	4%↑
	composition			Binding agents	5%↑

Note - 1. Parameter values are not guaranteed.

Thermal Tape Specification

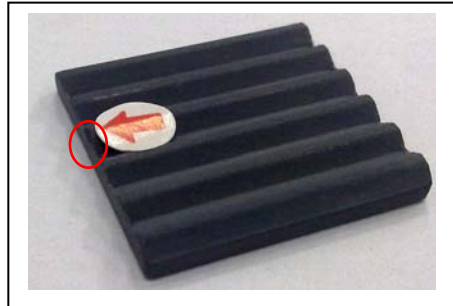
Part Number		TT-025	Test Method	Remark
Color		White	...	
Adhesive Type		Acrylic Polymer	...	
Carrier		Fiber Glass	...	
Thickness(mm)	Tape	0.25	ASTM D-3652	
	Liner	0.13		
Density	(g/cm ²)	1.42	...	
Hardness	(Shore A)	45	ASTM D-2240	
Thermal Conductivity	(W/m-k)	0.8	ADTM D5470	
Operation Temp.	(°C)	-40 ~150(Short Term) -40~90(Long Term)	...	
Insulation Strength	(Volt/mm)	6500	ASTM D-149	
Tensile Strength	(lbs./in)	180	ASTM D-3759	
Elongation	(%)	5	ASTM D-3759	
Static Shear Adhesion	(1kg/0.5in ²)	22°C PASS 70°C PASS	ASTM D-3654	10,000 mins
Adhesion to Stainless Steel	(g/25.4mm)	15 min RT	1991	ASTM D-3330 180 degree 0.05mm Al foil 22°C . 50% RH
		72 hr RT	2167	
Adhesion to ABS		15 min RT	1536	
		72 hr RT	1755	
Adhesion to PC		15 min RT	1840	
		72 hr RT	1950	
Adhesion to PP		15 min RT	1400	
		72 hr RT	1650	
Shelf Life	12 months from date receipt by customer when stored in original carton at 22 °C and 50% relative humidity			

Note - 1. Parameter values are not guaranteed.

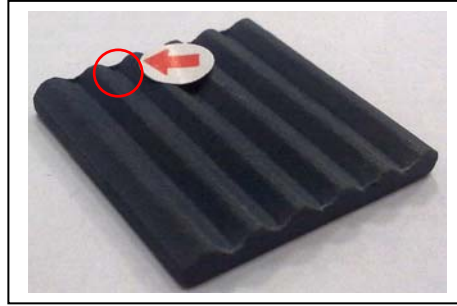
The Limitation Card of Appearance Failure

P/N	Ceramic Heat Sink Series	NO.	
Item	Appearance Description & Inspection standard	Date	2012. 05. 18

Accepted Product



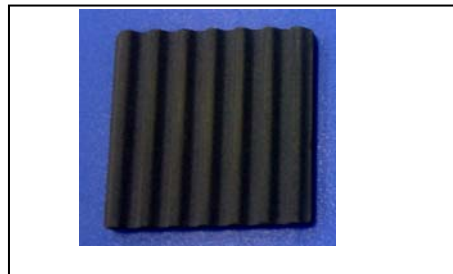
Appearance Description : Crack
Limitation : Less than 2mm



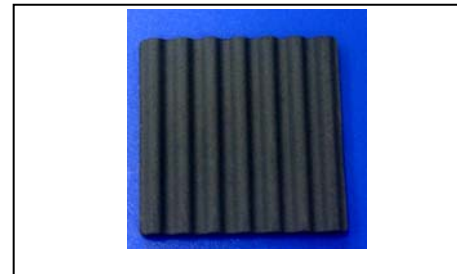
Appearance Description : Burr
Limitation : Less than 2mm



Appearance Description : Hole
Limitation : Less than 2mm



Appearance Description : Deep Gary

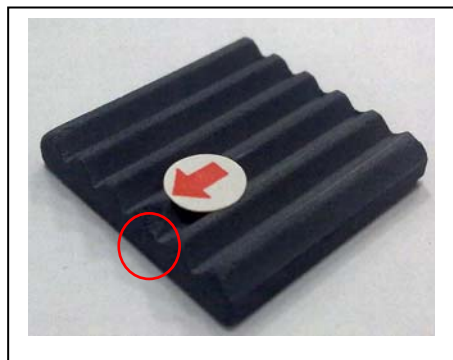


Appearance Description : Gary

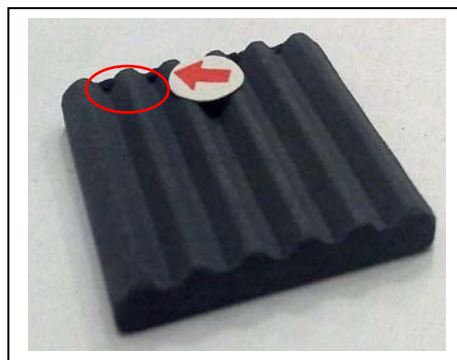


Appearance Description : Light Gary

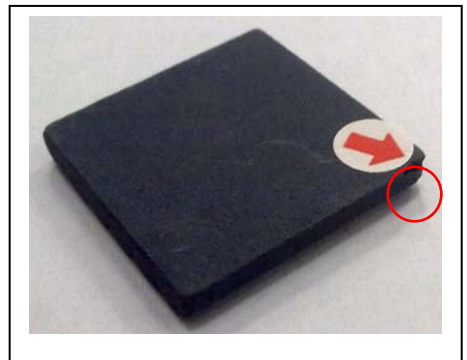
Rejected Product



Appearance Description : Crack
Failure : More than 2mm



Appearance Description : Burr
Failure : More than 2mm



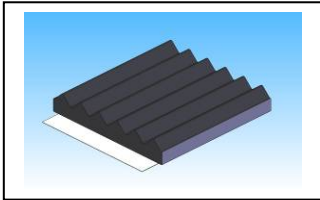
Appearance Description : Hole
Failure : More than 2mm

Remark		DRAWN	CHECKED	CONFIRMED
		Daniel	Jeffery	Jeffery

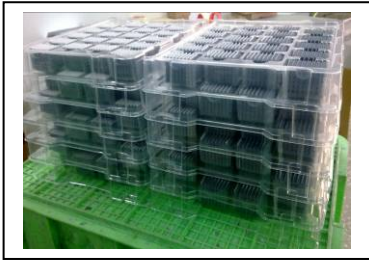
TQ-056B

Packing Specification

Item	Ceramic Heat Sink with Micro-Pores Structure
SPEC	Ceramic Heat Sink Flat Type_30*30*5(mm)_Wave_Tape
ABC P/N	MPW303050BTF
Customer P/N.	



Dim:305*255*36(mm)
Q' ty : 160 pcs



Dim: 525*310*235 (mm)
Q'ty : 160*12=1,920 pcs
N.W: 12.5kg
G.W: 14.5kg



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ABC ELECTRONICS GROUP