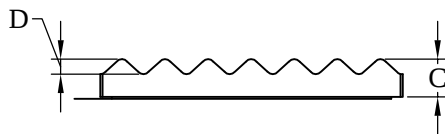
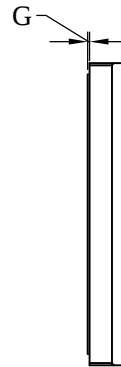
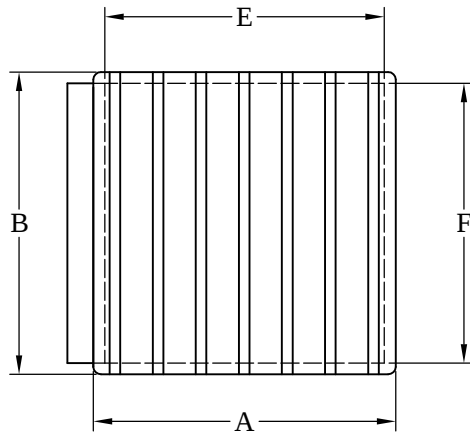


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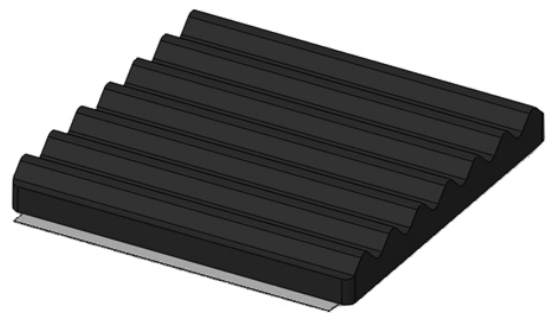
REF. :

PROD. NAME	Ceramic Heat Sink	ABC'S DWG NO.	MPW□□□□□□BTF-□□□		
		REV.	20221212-C	PAGE	1

I . Configuration :



Wave number : N



* Products comply with RoHS' requirements

SPECIFICATION FOR APPROVAL

REF. :

PROD.	Ceramic Heat Sink	ABC'S DWG NO.	MPW□□□□□□BTF-□□□			
NAME		REV.	20221212-C	PAGE	2	

II . dimensions and data sheet :

DWG. No.	Ceramic heat sink (Length, width, thickness & wave height)				Thermal tape (Length, width & thickness)			Wave number	Unit : g Weight (ref.)
	A	B	C	D	E	F	G	N	
MPW151550BTF-□□□	15.0±0.3	15.0±0.3	5.0±0.2	2.0±0.2	13.5±0.5	13.5±0.5	0.25±0.07	3	1.70
MPW151570BTF-□□□	15.0±0.3	15.0±0.3	7.0±0.2	2.0±0.2	13.5±0.5	13.5±0.5	0.25±0.07	3	2.55
MPW202050BTF-□□□	20.0±0.5	20.0±0.5	5.0±0.2	2.0±0.2	18.0±0.5	18.0±0.5	0.25±0.07	4	3.05
MPW252550BTF-□□□	25.0±0.5	25.0±0.5	5.0±0.2	2.0±0.2	23.0±0.5	23.0±0.5	0.25±0.07	5	4.60
MPW303050BTF-□□□	30.0±0.5	30.0±0.5	5.0±0.2	2.0±0.2	27.5±0.5	27.5±0.5	0.25±0.07	6	7.03
MPW352270BTF-□□□	35.0±0.5	22.0±0.5	7.0±0.2	2.0±0.2	33.0±0.5	20.0±0.5	0.25±0.07	6	8.10
MPW403550BTF-□□□	40.0±0.5	35.0±0.5	5.0±0.2	2.0±0.2	38.0±0.5	33.0±0.5	0.25±0.07	7	10.30
MPW404050BTF-□□□	40.0±0.5	40.0±0.5	5.0±0.2	2.0±0.2	37.0±0.5	37.0±0.5	0.25±0.07	7	12.00

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SPECIFICATION FOR APPROVAL

REF. :

PROD.	Ceramic Heat Sink	ABC'S DWG NO.	MPW□□□□□□BTf-□□□		
NAME		REV.	20221212-C	PAGE	3

III . 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		°C	<500	
	Linear thermal expansion coefficient		10 ⁻⁶	4.13	RT~300°C
Chemical composition	Main composition			SiC	80%↑
	Composition			Al ₂ O ₃	10%↑
	Composition			SiO ₂	4%↑
	Composition			Binding agents	5%↑

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PROD.	Ceramic Heat Sink	ABC'S DWG NO.		MPW□□□□□□BTF-□□□		
NAME		REV.	20221212-C	PAGE	4	

IV . 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 D3652	
	Liner	0.13			
Density (g/cm ²)		1.42		...	
Hardness (Shore A)		45		ASTM D2240	
Thermal conductivity (W/m-k)		0.8		ASTM D5470	
Operation temp. (°C)		-40~110		...	
Insulation strength (Volt/mm)		6500		ASTM D149	
Tensile strength (lbs./in)		180		ASTM D3759	
Elongation (%)		5		ASTM D3759	
Static shear adhesion (1kg/0.5in ²)		22°C PASS 70°C PASS		ASTM D3654	10,000 mins
Adhesion to Stainless steel	(g/25.4mm)	15 min RT	1991	ASTM D3330	180 degree 0.05mm Al foil 22°C. 50% RH
		72 hr RT	2167		
Adhesion to ABC		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				

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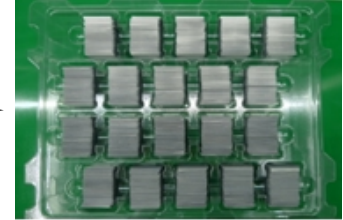
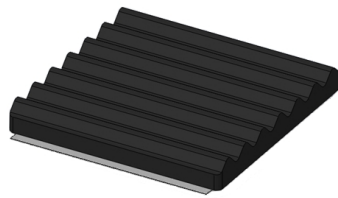
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SPECIFICATION FOR APPROVAL

REF. :

PROD.	Ceramic Heat Sink	ABC'S DWG NO.	MPW□□□□□□BTF-□□□		
NAME		REV.	20221212-C	PAGE	5

V . Packaging information (Tary) :



Q'TY & G.W.Per Packaging

DWG NO.	Inner : Tary		Outer : Carton		
	Q'TY(pcs)	G.W.(g)	Q'TY(pcs)	G.W.(kg)	Size (cm)
MPW151550BTF	432	850	2,160	6.00	52.0x32.0x14.0
MPW151570BTF	324	850	1,620	6.00	52.0x32.0x14.0
MPW202050BTF	432	1,450	2,160	8.70	52.0x32.0x14.0
MPW252550BTF	160	850	1,920	11.00	52.5x31.0x23.5
MPW303050BTF	160	1,250	1,920	15.50	52.5x31.0x23.5
MPW352270BTF	60	500	600	6.00	52.5x31.0x23.5
MPW403550BTF	100	1,150	1,000	12.50	52.5x31.0x23.5
MPW404050BTF	100	1,350	1,000	14.00	52.5x31.0x23.5

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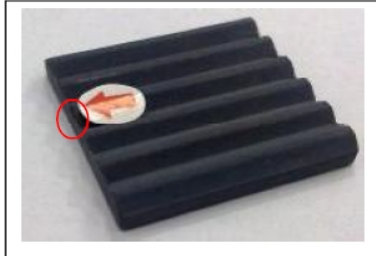
SPECIFICATION FOR APPROVAL

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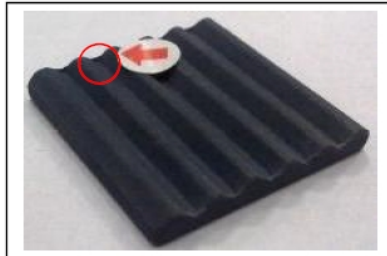
PROD.	Ceramic Heat Sink	ABC'S DWG NO.	MPW□□□□□□BTF-□□□		
NAME		REV.	20221212-C	PAGE	6

VI . Criteria of product inspection :

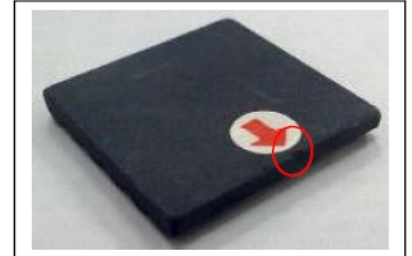
(1) Accepted Product



Appearance Description : Crack
Limitation : Less than 2 mm



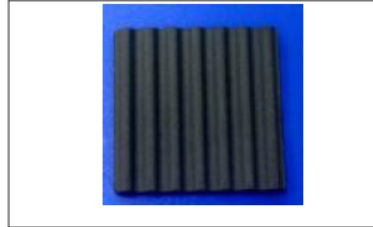
Appearance Description : Burr
Limitation : Less than 2 mm



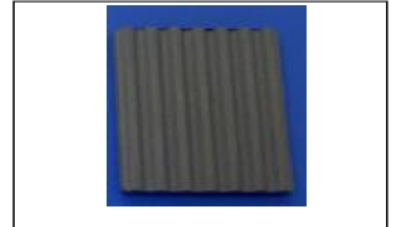
Appearance Description : Hole
Limitation : Less than 2 mm



Appearance Description : Deep Gray

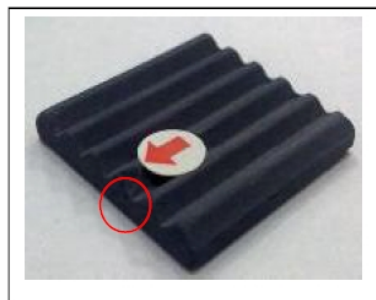


Appearance Description : Gray

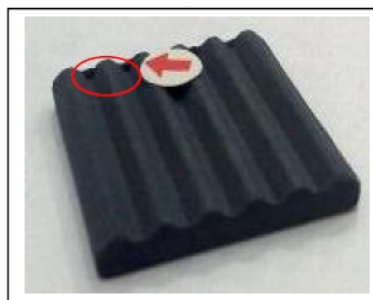


Appearance Description : Light Gray

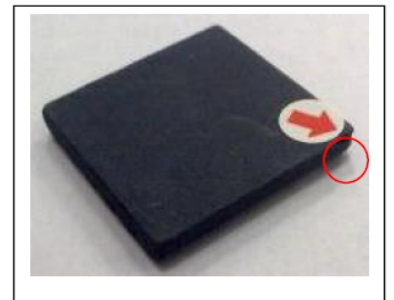
(2) Rejected Product



Appearance Description : Crack
Failure : More than 2 mm



Appearance Description : Burr
Failure : More than 2 mm



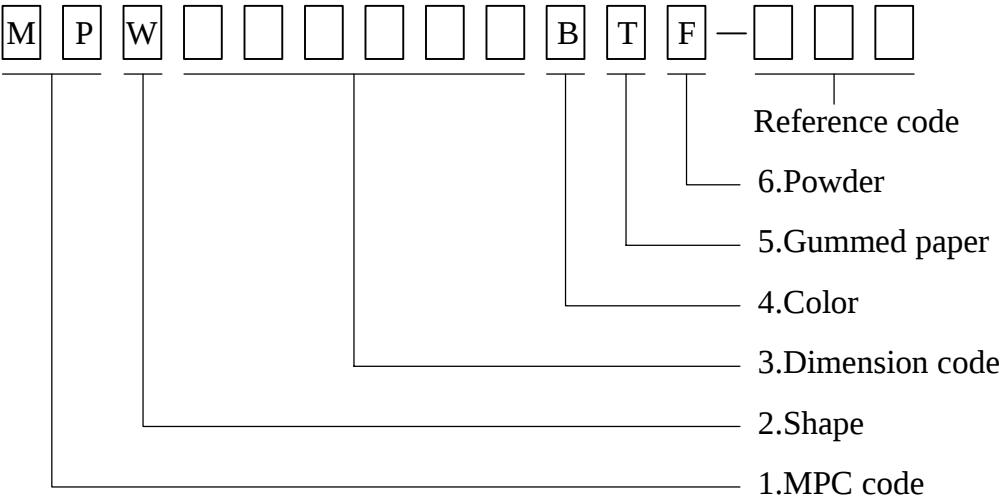
Appearance Description : Hole
Failure : more than 2 mm

SPECIFICATION FOR APPROVAL

REF. :

PROD.	Ceramic Heat Sink	ABC'S DWG NO.	MPW□□□□□□BTF-□□□		
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VII . Drawing number expression :



- * 1- MP : Heat sink
- * 2- S : flat 、 W : wave 、 F : fin 、 R : reel
- * 3- Long, wide, thick
- * 4- B : black 、 G : green
- * 5- A : no thermal tape 、 T : Thermal tape with fiberglass 、 N : Thermal tape with non fiberglass
C : circle and L type thermal tape 、 S : customer specified 、 2~9 : special case
- * 6- A : Outsourcing SiC product 、 F : SiC spray granulation 、 G : graphene composite