

To : DIGI-KEY CORPORATION

Issue No. : 151EYG101014006

Date of Issue : 14.Oct.2010

Classification : New Changed

SPECIFICATION SHEET

Product Description : PGS Graphite Sheet

Product Part Number : EYGA121803S

Customers Part Number :

Country of Origin : Japan

Applications :

Circuit Components Business Unit
Panasonic Electronic Devices Co.,Ltd.

1037-2 Kamiosatsu, Chitose City, Hokkaido 066-8502 Japan

Engineering Section

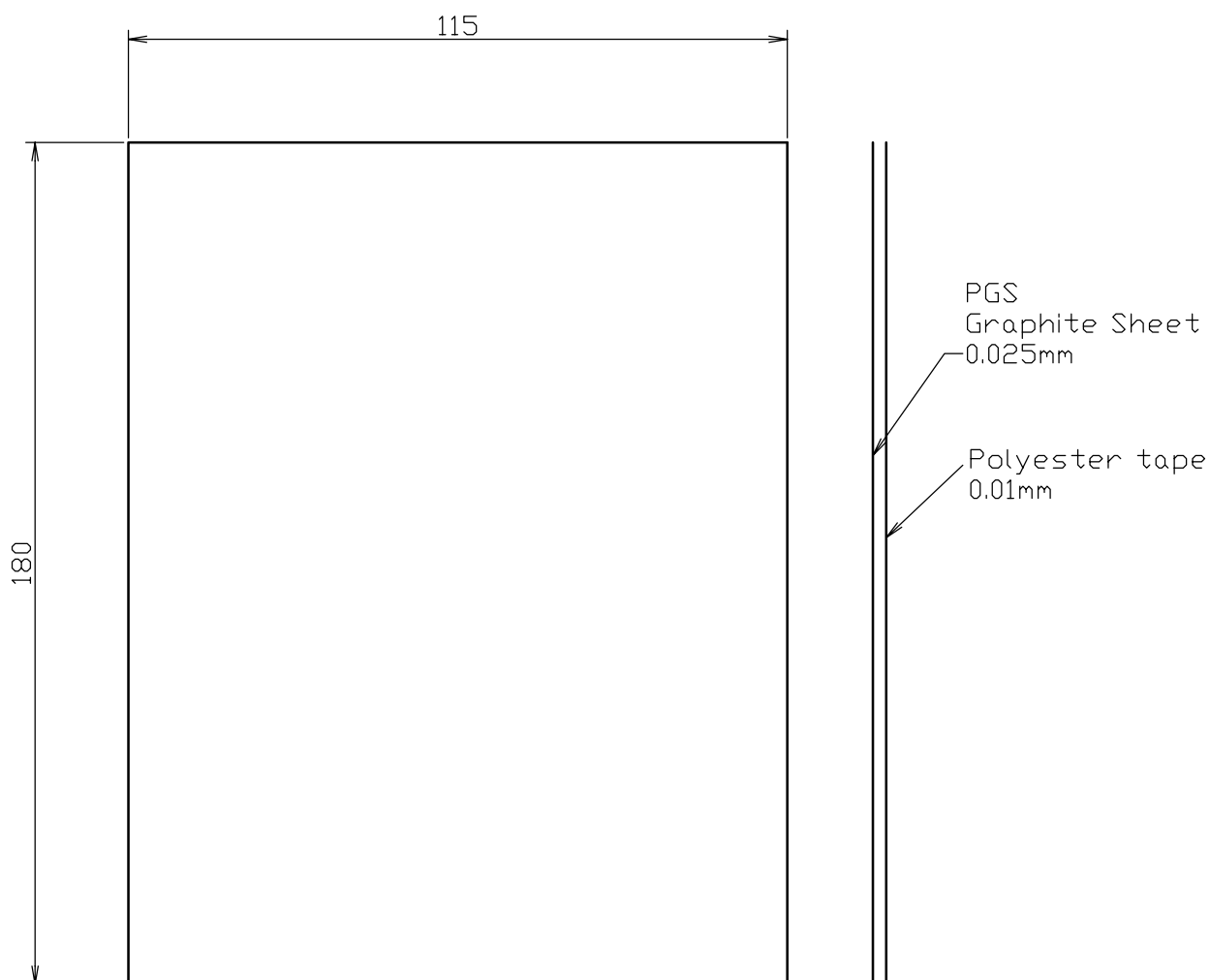
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Panasonic

CLASSIFICATION		SPECIFICATION SHEET		No. 151S- EYGA121803S																			
SUBJECT		Part Number		PAGE 1 of 4																			
PGS Graphite Sheet		EYGA121803S		DATE 14.Oct.2010																			
1.Scope																							
This specification applies to Panasonic's PGS Graphite Sheet																							
2.Explanation of Part Number																							
Subject : PGS Graphite Sheet																							
Part Number : EYGA121803S																							
<div><div><div>EYGA</div><div>Product Code</div></div><div><div>A</div><div>Form</div></div><div><div>12</div><div>Shorter Side (cm)</div></div><div><div>18</div><div>Longer Side (cm)</div></div><div><div>07</div><div>Thickness</div></div><div><div>S</div><div>Design Number</div></div></div> <div><table><tr><th>Code</th><th>Form</th></tr><tr><td>S</td><td>Sheet</td></tr><tr><td>M</td><td>Multi-layered</td></tr><tr><td>A</td><td>Tape attached</td></tr></table><table><tr><th>Code</th><th>Thickness</th></tr><tr><td>10</td><td>0.1mm</td></tr><tr><td>07</td><td>0.07mm</td></tr><tr><td>03</td><td>0.025mm</td></tr><tr><td>02</td><td>0.017mm</td></tr></table></div>						Code	Form	S	Sheet	M	Multi-layered	A	Tape attached	Code	Thickness	10	0.1mm	07	0.07mm	03	0.025mm	02	0.017mm
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S	Sheet																						
M	Multi-layered																						
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Code	Thickness																						
10	0.1mm																						
07	0.07mm																						
03	0.025mm																						
02	0.017mm																						
3.Operating and storage Temperature Range																							
Operating Temperature Range : -20 to 100 cels.																							
Storage Temperature Range : -20 to 80 cels.																							
4.Performance																							
4-1.Appearance																							
Contents		Performance		Test Method																			
4-1-1 Appearance		There shall be no mechanical scars,tears,hollows which affect the performance		Compared with limit sample																			
4-1-2 Shape and Dimension		Shown in the figure Page 4 of 4		--																			
4-2.Initial Performance																							
Contents		Performance		Test Method																			
4-2-1 Thermal Diffusivity (PGS)		More than 5.0 cm ² /sec		Test piece;30mm×5mm sheet Testing equipment;"Laser Pit" Model PIT-IM type (The Manufacturer of the Equipment is SINKU-RIKO)																			
4-3. Reliability Tests																							
Contents		Performance		Test Method																			
4-3-1 Damp Heat Test		Shall meet the performance prescribed clause 4-1 and 4-2-1		Test temperature : 85±3 cels. Relative humidity : 85±5 %RH Test period : 1000 hours																			
Circuit Components Business Unit Panasonic Electronic Devices Co.,Ltd. 1037-2 Kamiosatsu, Chitose City, Hokkaido, Japan				APPROVAL Funaba	CHECK Kubo																		
					DESIGN Kawamura																		

CLASSIFICATION		SPECIFICATION SHEET	No. 151S- EYGA121803S
SUBJECT		Part Number	PAGE 3 of 4
PGS Graphite Sheet		EYGA121803S	DATE 14.Oct.2010
<p>6.2 Application notes</p> <p>6.2.1 Use protective materials when handling and/or applying the PGS, do not use items with sharp edges as they might tear or puncture the PGS.</p> <p>6.2.2 The PGS dose not work properly if overheated.</p> <p>6.2.3 Thermal conductivity is dependant on the way it is used. Test the adaptability of PGS to your application before use.</p> <p>6.2.4 The PGS has conductivity. If required, the PGS should be provided insulation.</p> <p>6.2.5 Punching Graphite sheets sends graphite powder; therefore, your check whether or not the graphite powder fall harms devices is necessary.</p> <p>6.2.6 The PGS shall not be stored under severe conditions of salt water, direct sunlight or corrosive gases (hydrogen sulfide, sulfurous acid, chlorine, ammonia etc.). The PGS shall not be stored near acid.</p> <p>7.Substance of this product</p> <p>7-1 This product not been manufactured with any ozone depleting chemical controlled under the Montreal Protocol.</p> <p>7-2 This product comply with RoHS(Restriction of the use of certain Hazardous Substance in electrical and electronic equipment) Directive(2002/95/EC).</p> <p>7-3 All the materials used in this part are registered material under the Law Concerning the Examination and Regulation of Manufacture,etc.of Chemical Substance.</p>			
Note:			

RevNo	Revision note	Date	Signature	Checked



Notes :

1. All dimensions are millimeters.
2. Materials ; PGS Graphite Sheet 0.025mm thick
3. Tolerance ; $X \pm 3$

②	1	Polyester tape (0.01mm)	
①	1	PGS Graphite Sheet (0.025mm)	
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Design N.KAWAMURA	Check K.KUBO	Approval M.FUNABA	Scale
CIRCUIT COMPONENTS BUSINESS UNIT PANASONIC ELECTRONIC DEVICES CO.,LTD		Name PGS Graphite Sheet	Type No. EYGA121803S
		Drawing No. 4-4	EYGA121803S