3M[™] Serial Attached SCSI (SAS) Connector

Surface Mount, Vertical Plug

SBH Series



- 3.0 Gbps input/output connector for HDD
- Two contact mating levels for early-mate and late-break allows "blind mating" or "hot swap" applications
- Meets SFF-8482 Specification
- Meets SAS Specification, SAS-1.1
- RoHS* compliant

Date Modified: June 14, 2006

TS-2178-01 Sheet 1 of 3

Physical

Insulation

Material: High Temperature Thermoplastic

Flammability: UL 94V-0 Color: Black

Contact

Material: Copper Alloy

Plating

Underplating: 50 - 80 μ " [1.27 - 2.03 μ m] Nickel Wiping Area: 30 - 40 μ " [0.76 - 1.02 μ m] Gold Solder Tails: 100 - 200 μ " [2.54 - 5.08 μ m] Tin

Marking 3M Logo

Electrical

Current Rating: Power Pin: 1.5 A

Signal Pin: 500 mA

Insulation Resistance: $10^3 \text{ M}\Omega \text{ min.}$

Withstanding Voltage: 500 VAC at sea level

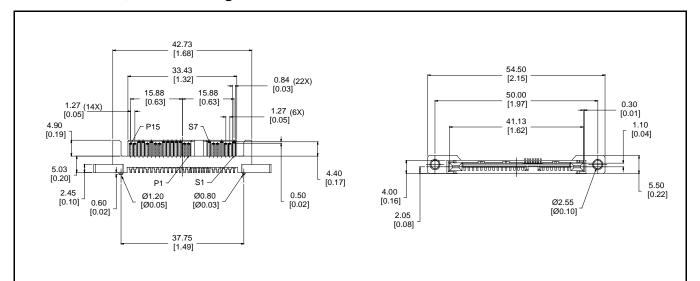
Environmental

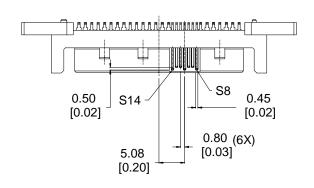
Operating Temperature: 0°C to +55°C **Non-Operating Temperature:** -40°C to +85°C

*RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electrical and Electronic Equipment "RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

Surface Mount, Vertical Plug

SBH Series





CONNECTOR PIN ASSIGNMENT					
S1 - GROUND	S8 - GROUND	P1 - 3.3 V	P8 - 5 V		
S2 - A +	S9 - A +	P2 - 3.3 V	P9 - 5 V		
S3 - A -	S10 - A -	P3 - 3.3 V	P10 - GROUND		
S4 - GROUND	S11 - GROUND	P4 - GROUND	P11 - GROUND		
S5 - B -	S12 - B -	P5 - GROUND	P12 - GROUND		
S6 - B +	S13 - B +	P6 - GROUND	P13 - 12 V		
S7 - GROUND	S14 - GROUND	P7 - 5 V	P14 - 12 V		
			P15 - 12 V		

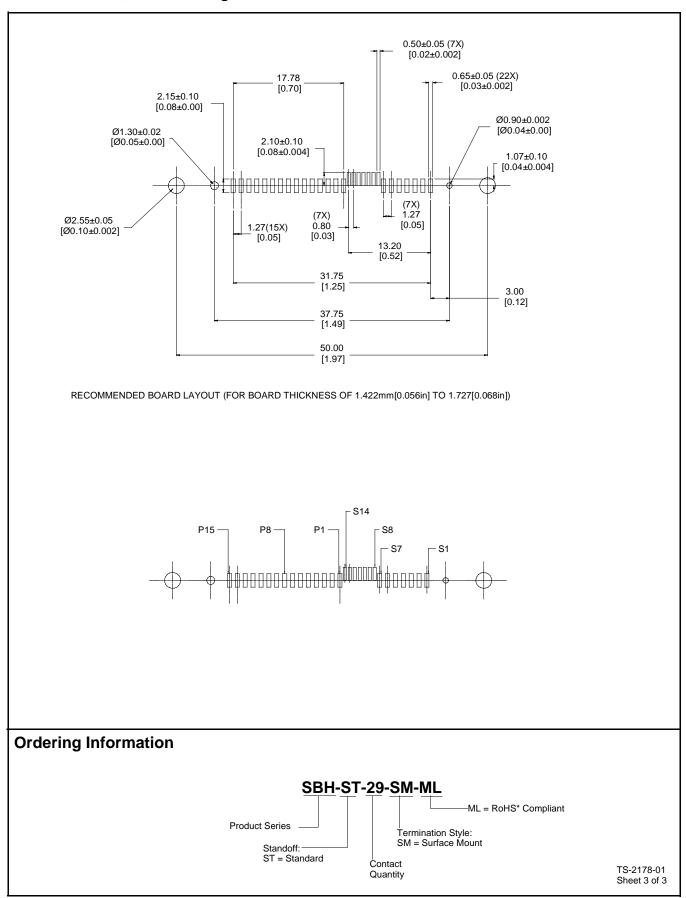
mm [Inch]

Tolerance Unless Noted				
	.0	.00	.000	
+mm	± .3	± .25	± .127	

[] Dimensions for Reference only

> TS-2178-01 Sheet 2 of 3

SBH Series



Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

3M

3M Electronics

6801 River Place Blvd. Austin, TX 78726-9000 800/225-5373 www.3M.com/electronics

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of 90 days from the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.



Minimum 10% Post-Consumer Fiber Printed in USA.

© 3M 2006