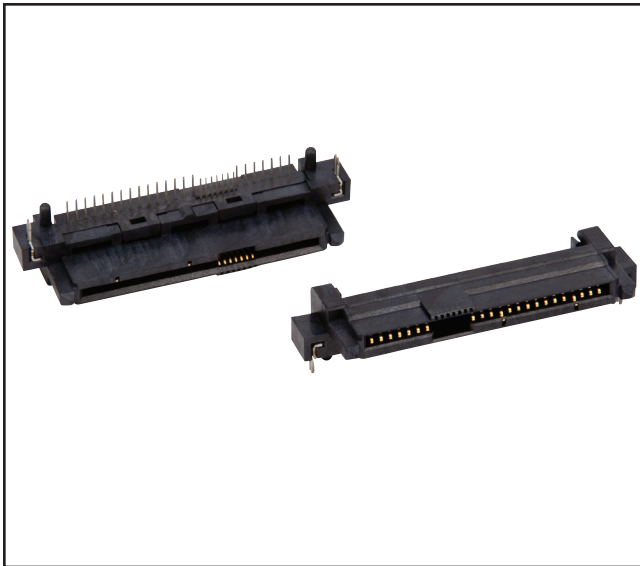


# 3M™ Serial Attached SCSI (SAS) Connector

Boardmount Right Angle, Through-Hole Receptacle

SBR Series



- 6 Gbps input/output connector for backplane applications
- Two contact mating levels for early-mate and late-break allows “blind mating” or “hot swap” applications
- Capable of accepting HDD fitted with SAS or Serial Advanced Technology Attachment (SATA) Header
- Compatible with drives compliant to SFF-8223, SFF-8323, and SFF-8523
- Designed in compliance with SFF-8482 Rev 2.2
- See Regulatory Information Appendix (RIA) in the “RoHS compliance” section [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: March 3, 2011

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Sheet 1 of 3

## Physical

**Insulation:**  
Material: High Temperature Thermoplastic  
Flammability: UL94V-0  
Color: Black

**Contact:**  
Material: Copper Alloy

**Plating:**  
Underplating: 50  $\mu$ ” [ 1.27  $\mu$ m ] Min. Nickel  
Wiping Area: 30  $\mu$ ” [ 0.76  $\mu$ m ] Min. Gold  
Solder Tails: 100  $\mu$ ” [ 2.54  $\mu$ m ] Min Matte Tin

**Marking:** 3M Logo

## Electrical

**Current Rating:** Power Pin: 1.5 A  
Signal Pin: 500 mA

**Insulation Resistance:** 10<sup>3</sup> M $\Omega$  min.

**Withstanding Voltage:** 500 V<sub>AC</sub> at sea level

## Environmental

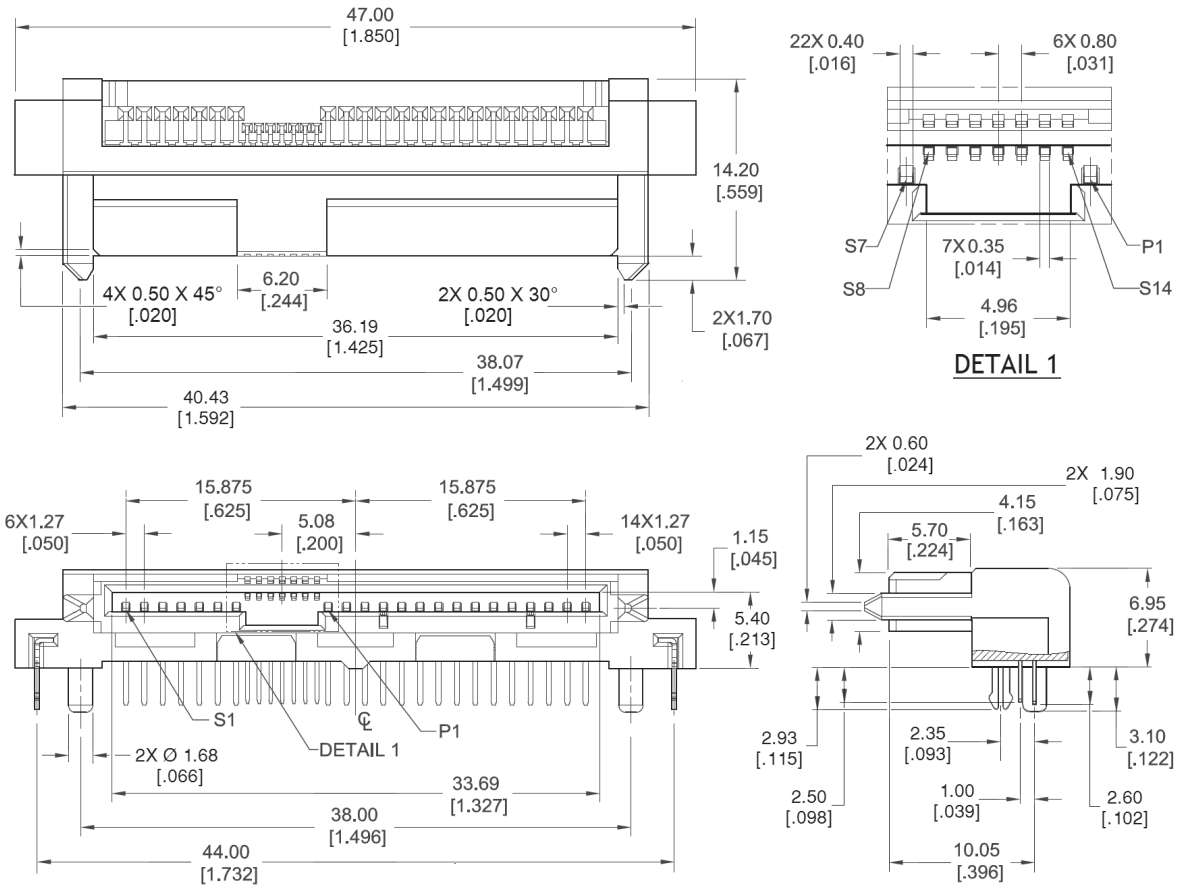
**Operating Temperature:** -0°C to +55°C  
**Non-Operating Temperature:** -40°C to +85°C

UL File No.: E68080

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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 - 12V



Tolerance Unless Noted			
	mm [Inch]		
	.0	.00	.000
mm	±.38	±.25	±.13
inch	±.015	±.010	±.005

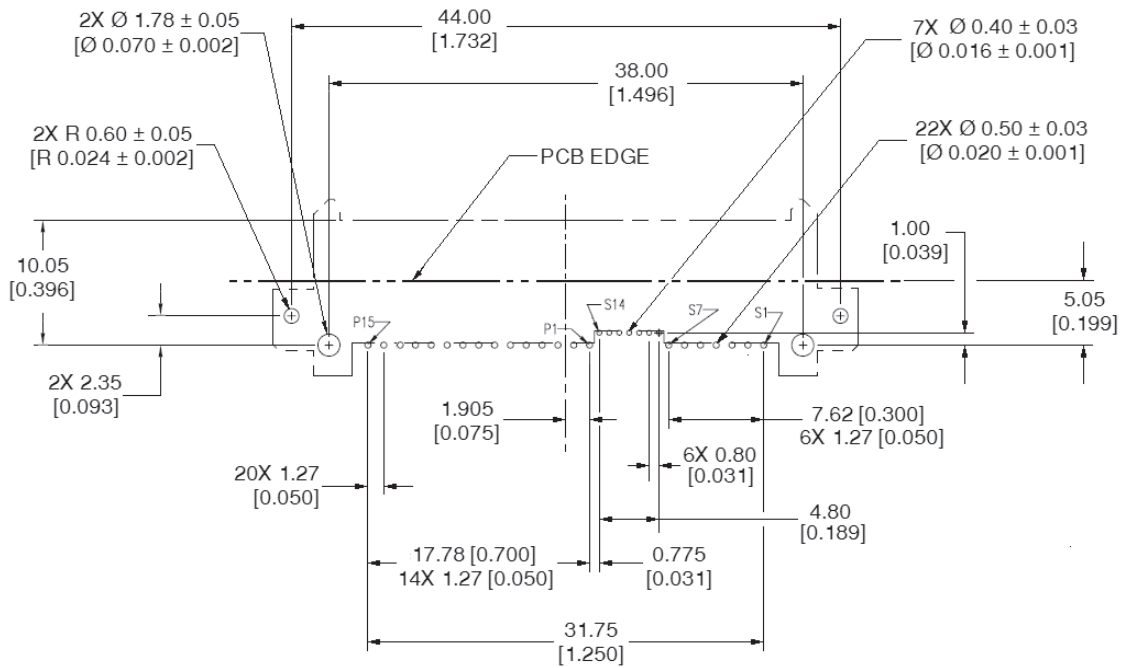
[ ] Dimensions for Reference only

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# 3M™ Serial Attached SCSI (SAS) Connector

Boardmount Right Angle, Through-Hole Receptacle

SBR Series



RECOMMENDED PCB THICKNESS 1.83 [0.073] Nominal

## Ordering Information

**SBR - RA - 29 - S - ML** (RIA E1 & C1)

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Sheet 3 of 3

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