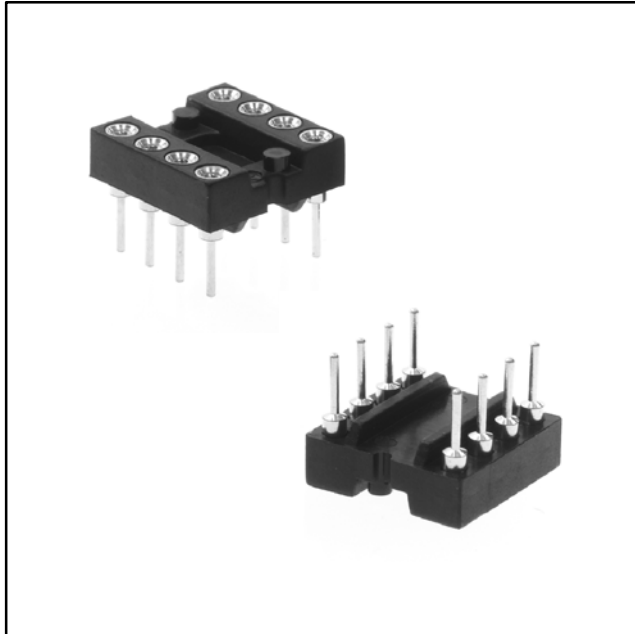


# 3M™ DIP Socket

Screw Machine, Open Body, Automated Insertion

ICE SD2 Series



- High retention pin sockets prevent “IC walk-out” during heavy vibration
- Pin socket design prevents solder wicking and flux entrapment
- Four-finger beryllium copper contacts provide low, stable contact resistance and accept short IC leads
- Side and end stackable
- High temperature IR compatible plastic available
- Standoff on insulator eases sockets through automated insertion machines

Date Modified: July 28, 2004

TS-1103-02  
Sheet 1 of 3

---

## Physical

### Insulation

Material: Black Polyester Glass Filled or HTN  
Flammability: UL 94V-0  
Color: Black

### Contact

Shell Material: Half Hard Brass  
Clip Material: Beryllium Copper

### Plating

Underplate: 50  $\mu$ " [ 1.27  $\mu$ m ] min. Nickel  
Wiping Area: See Ordering Information  
Terminal Area: 200  $\mu$ " [ 5.08  $\mu$ m ] min. Tin/Lead

### Insertion / Removal Forces:

Insertion Force: 12 ounces max per contact using .017" [ 0.43mm ] dia. pin  
Withdrawal Force: 1.5 ounces min. per contact using .017" [ 0.43mm ] dia. pin  
(Average of 2nd 3rd and 4th Cycle)

---

## Electrical

**Current Rating:** 1.0 A

**Contact Resistance:** 20 m $\Omega$  max.

**Dielectric Withstanding Voltage:** 500V AC for 1 minute

**Insulation Resistance:** 5,000 M $\Omega$  min. at 500V DC

**Withstanding Voltage:** 650V AC for 1 minute

**Capacitance:** 1 pF max.

---

## Environmental

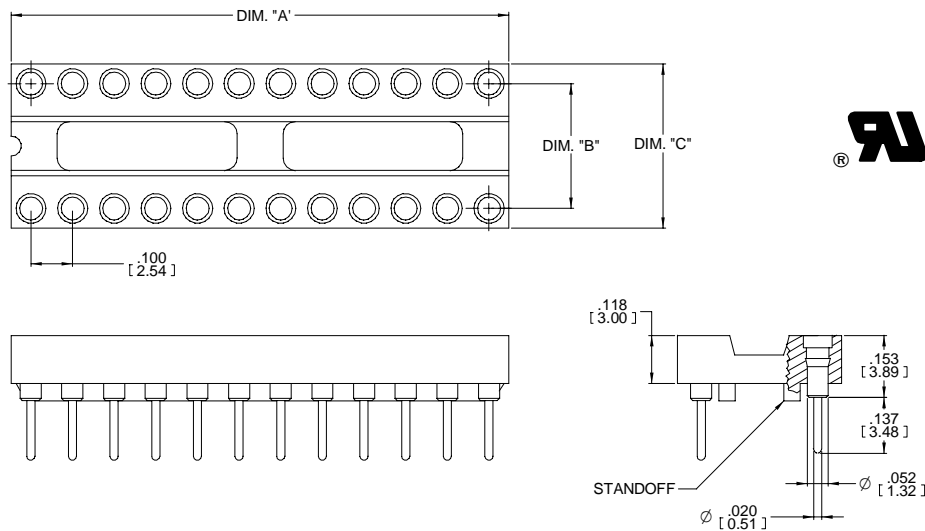
**Temperature Rating:** -65°C to +125°C

UL File No.: E68080

**3M**  
**Interconnect Solutions**  
<http://www.3M.com/interconnects/>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

Contact Quantity	Description	Dimension A	Dimension B	Dimension C	Body Style
6	ICE-063-SD2-XXXX	.295 [7.49]	.300 [7.62]	.395 [10.03]	A
8	ICE-083-SD2-XXXX	.395 [10.03]	.300 [7.62]	.395 [10.03]	A
10	ICE-103-SD2-XXXX	.495 [12.57]	.300 [7.62]	.395 [10.03]	A
14	ICE-143-SD2-XXXX	.695 [17.65]	.300 [7.62]	.395 [10.03]	A
16	ICE-163-SD2-XXXX	.795 [20.19]	.300 [7.62]	.395 [10.03]	A
18	ICE-183-SD2-XXXX	.895 [22.73]	.300 [7.62]	.395 [10.03]	B
20	ICE-203-SD2-XXXX	.995 [25.27]	.300 [7.62]	.395 [10.03]	B
22	ICE-223-SD2-XXXX	1.095 [27.81]	.300 [7.62]	.395 [10.03]	B
24	ICE-243-SD2-XXXX	1.195 [30.35]	.300 [7.62]	.395 [10.03]	B
24	ICE-246-SD2-XXXX	1.195 [30.35]	.600 [15.24]	.695 [17.65]	B
28	ICE-283-SD2-XXXX	1.395 [35.43]	.300 [7.62]	.395 [10.03]	B
28	ICE-286-SD2-XXXX	1.395 [35.43]	.600 [15.24]	.695 [17.65]	B
32	ICE-326-SD2-XXXX	1.595 [40.51]	.600 [15.24]	.695 [17.65]	B
40	ICE-406-SD2-XXXX	1.995 [50.67]	.600 [15.24]	.695 [17.65]	C
42	ICE-426-SD2-XXXX	2.095 [53.21]	.600 [15.24]	.695 [17.65]	C
48	ICE-486-SD2-XXXX	2.395 [60.83]	.600 [15.24]	.695 [17.65]	C

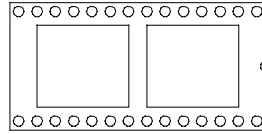


Inch [mm]			
Tolerance Unless Noted			
	.0	.00	.000
Inch	± .1	± .01	± .005

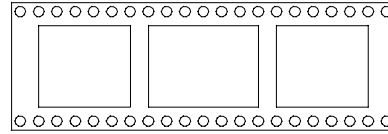
[ ] Dimensions for Reference only



Body Style "A"



Body Style "B"



Body Style "C"

**Acceptable Pin Sizes**

Diameter: .016" - .021" [0.41 mm - 0.53 mm]

Length: .110" - .135" [2.79 mm - 3.43 mm]

**Mounting Information**

.020" [0.51 mm] Dia. Pin: .030" ± .002" [0.76 mm ± 0.05 mm] dia. PCB hole

**Ordering Information**

**ICE - XX X - T - SD2 - XXXX**

Contact Quantity  
(See Table)

Row Spacing:  
3 = .300 [ 7.62 ]  
6 = .600 [152.4 ]  
(See Table)

Body Material:  
Blank: Standard  
T: High Temp

Plating Options:  
TG30 = 30 μ" [ 0.76 μm ] min. Gold  
TT = 150 μ" [ 3.81 μm ] min. Tin/Lead

TS-1103-02  
Sheet 3 of 3

## 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.



### Electronic Solutions Division

6801 River Place Blvd.  
Austin, TX 78726-9000  
[www.3M.com/esd](http://www.3M.com/esd)

## Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of 1 year from the date 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 loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.**