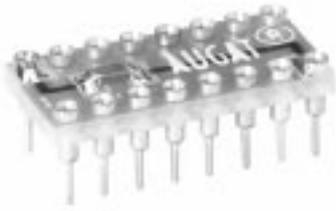


# DS Series *Capacitor Socket With Four-Finger Contact*



DS1-316-1AR

## FEATURES:

Augat has combined its four-finger high reliability contact with a surface mount capacitor and a circuit assembly to create a full line of decoupling (dual-in-line) sockets.

- Available in three lead termination styles, .125" (3,18) PC tail, .180" (4,57) PC tail and 3-level solderless wire wrap
- Reduces PCB utilized space by 12% to 15%
- Allows handling, inventory and installation of one component instead of two
- Available in three capacitor values: .01 $\mu$ F, .10 $\mu$ F and .33 $\mu$ F
- Optional assignment of voltage and ground available for custom decoupling requirements, consult factory

## APPLICATION DIMENSIONS:

- PCB Hole Size Range: .055"  $\pm$  .003" (1,40  $\pm$  0,08) Solderless wrap  
.035"  $\pm$  .003" (0,89  $\pm$  0,08) PC solder termination
- IC Pin Dimension Range: .016" to .021" (0,41 to 0,53) dia.  
.105" (2,67) min. length

## MATERIAL SPECIFICATIONS:

Insulator ..... Glass epoxy  
Outer Sleeve ..... Machined brass/formed copper,  
tin/lead or gold plated  
Inner Contact ..... Beryllium copper, gold over nickel  
or tin/lead plated

## PERFORMANCE SPECIFICATIONS:

### MECHANICAL

Vibration ..... Passed MIL-STD-1344, Method 2005.1, Cond. II  
Shock ..... Passed MIL-STD-1344, Method 2004.1, Cond. C  
Durability ..... Passed 50 cycles  
Normal Force ..... 115 Grams (4.1 Oz.) min. with .018" (0,46) dia.  
polished steel pin (typ.)  
Inner Contact  
Retention ..... 7.5 Lbs. per line average  
Solderability ..... Passed MIL-STD-202, Method 208  
Insertion Force ..... 179 Grams (6.3 oz.) average with .018" (0,46) dia.  
polished steel pin  
Withdrawal Force ..... 63 Grams (2.2 oz.) average with .018" (0,46) dia.  
polished steel pin

### ELECTRICAL

Contact Resistance ..... 10 Milliohms  
Contact Rating ..... 3 Amps  
Capacitance ..... 1.0 pF per MIL-STD-202F, Method 305  
(adjacent contacts max.)  
Insulation Resistance .... 5,000 Megohms @ 500 VDC per MIL-STD-1344,  
Method 3003.1  
Dielectric Withstanding  
Voltage ..... 1,000 VAC RMS per MIL-STD-1344,  
Method 3001.1

### ENVIRONMENTAL

Moisture Resistance ..... Passed MIL-STD-202, Method 106  
Temperature Cycling .... Passed MIL-STD-1344, Method 1003.1, Cond. A  
Operation Temp.\* ..... +10°C to +85°C

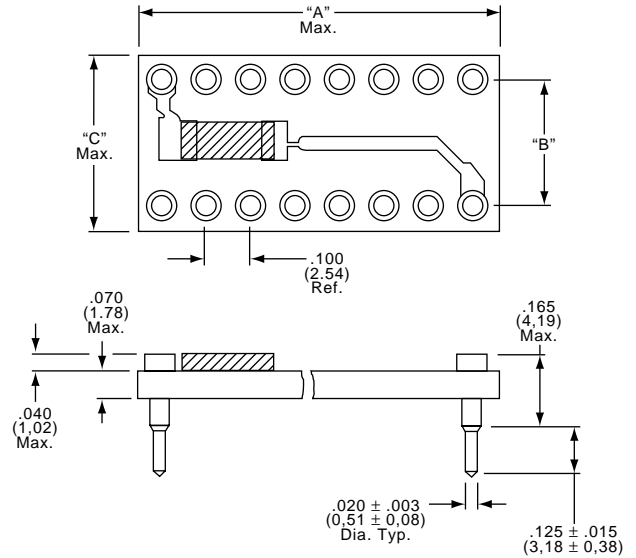
\* This temperature range applies to the capacitor only

# Capacitor Socket With Four-Finger Contact DS Series

## STANDARD CONFIGURATIONS

Number of Contacts	A	B*	C	Number of Contacts	A	B*	C	
8	.400 (10,16)	.300 (7,62)	.400 (10,16)	24	1.200 (30,48)	.400 (10,16)	.500 (12,70)	
14	.700 (17,78)			24	1.200 (30,48)	.600 (15,24)	.700 (17,78)	
16	.800 (20,32)			28	1.400 (35,56)	.300 (7,62)	.400 (10,16)	
18	.900 (22,86)			28	1.400 (35,56)	.600 (15,24)	.700 (17,78)	
20	1.000 (25,40)			32	1.600 (40,64)			
22	1.100 (27,94)			40	2.000 (50,80)			
22	.400 (10,16)			.500 (12,70)	48	2.400 (60,96)		
24	1.200 (30,48)			.300 (7,62)	.400 (10,16)			

\* Dimension B ± .005  
(0,13)



## HOW TO ORDER

.01µF Capacitor	.10µF Capacitor	.33µF Capacitor	Position	Centerline	Contact	Sleeve	
DS1-308-1AR	DS2-308-1AR	DS3-308-1AR	8	.300 (7,62)	Gold	Tin/Lead	
DS1-308-2AR	DS2-308-2AR	DS3-308-2AR			Gold	Gold	
DS1-314-1AR	DS2-314-1AR	DS3-314-1AR	14		Gold	Tin/Lead	
DS1-314-2AR	DS2-314-2AR	DS3-314-2AR			Gold	Gold	
DS1-316-1AR	DS2-316-1AR	DS3-316-1AR	16		Gold	Tin/Lead	
DS1-316-2AR	DS2-316-2AR	DS3-316-2AR			Gold	Gold	
DS1-318-1AR	DS2-318-1AR	DS3-318-1AR	18		Gold	Tin/Lead	
DS1-318-2AR	DS2-318-2AR	DS3-318-2AR			Gold	Gold	
DS1-320-1AR	DS2-320-1AR	DS3-320-1AR	20		Gold	Tin/Lead	
DS1-320-2AR	DS2-320-2AR	DS3-320-2AR			Gold	Gold	
DS1-322-1AR	DS2-322-1AR	DS3-322-1AR	22	Gold	Tin/Lead		
DS1-322-2AR	DS2-322-2AR	DS3-322-2AR		Gold	Gold		
DS1-324-1AR	DS2-324-1AR	DS3-324-1AR	24	Gold	Tin/Lead		
DS1-324-2AR	DS2-324-2AR	DS3-324-2AR		Gold	Gold		
DS1-422-1AR	DS2-422-1AR	DS3-422-1AR	22	.400 (10,16)	Gold	Tin/Lead	
DS1-422-2AR	DS2-422-2AR	DS3-422-2AR			Gold	Gold	
DS1-424-1AR	DS2-424-1AR	DS3-424-1AR	24		Gold	Tin/Lead	
DS1-424-2AR	DS2-424-2AR	DS3-424-2AR			Gold	Gold	
DS1-624-1AR	DS2-624-1AR	DS3-624-1AR	24		.600 (15,24)	Gold	Tin/Lead
DS1-624-2AR	DS2-624-2AR	DS3-624-2AR				Gold	Gold
DS1-328-1AR	DS2-328-1AR	DS3-328-1AR	28		.300 (7,62)	Gold	Tin/Lead
DS1-328-2AR	DS2-328-2AR	DS3-328-2AR				Gold	Gold
DS1-628-1AR	DS2-628-1AR	DS3-628-1AR	28		.300 (7,62)	Gold	Tin/Lead
DS1-628-2AR	DS2-628-2AR	DS3-628-2AR				Gold	Gold
DS1-632-1AR	DS2-632-1AR	DS3-632-1AR	32	.600 (15,24)	Gold	Tin/Lead	
DS1-632-2AR	DS2-632-2AR	DS3-632-2AR			Gold	Gold	
DS1-640-1AR	DS2-640-1AR	DS3-640-1AR	40	.600 (15,24)	Gold	Tin/Lead	
DS1-640-2AR	DS2-640-2AR	DS3-640-2AR			Gold	Gold	
DS1-648-1AR	DS2-648-1AR	DS3-648-1AR	48	.600 (15,24)	Gold	Tin/Lead	
DS1-648-2AR	DS2-648-2AR	DS3-648-2AR			Gold	Gold	

.180 PC Tails available

DSX-XXX-1BR, gold contact, tin/lead sleeve  
DSX-XXX-2BR, gold contact, tin/lead sleeve

For 3-level wire-wrap termination, please consult the factory.

Note: Part numbers in chart and in detail refer to a .125" (3,18) PC tail pin.

## Need more technical information?

Consult your Thomas & Betts  
sales office listed on the back cover

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