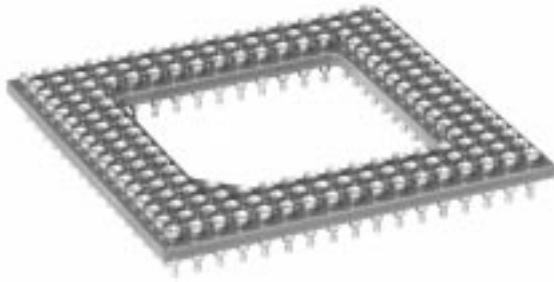


# GSM Series *Surface Mount LIF Sockets*



GSM169-1F1708-V

## FEATURES:

Augat's Surface Mount PGA Sockets offers unique features.

- "Butt Style" terminals with Augat's patented floating feature assures compliancy to the printed circuit board surface.
- The socket includes the Augat SUPERLIF™ low insertion force 37 grams (1.3 oz.) contact.
- High temperature insulators allow the sockets to be soldered with vaporphase and infrared reflow soldering process.

## MATERIAL SPECIFICATIONS:

Insulator .....	Glass epoxy, UL rated 94V-0
Sleeve .....	Machined brass/formed copper
Contact .....	Beryllium copper
Sleeve Plating .....	See Table 2
Contact Plating .....	See Table 2

## PERFORMANCE SPECIFICATIONS:

### MECHANICAL

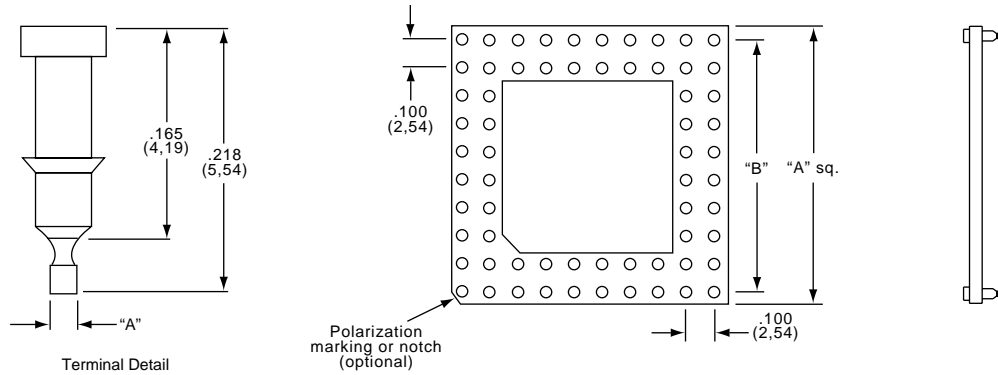
Vibration .....	Passed MIL-STD-1344, Method 2005, Condition V, D, 11.6 G's (RMS)
Shock .....	Passed MIL-STD-1344, Method 2004, Condition C, 100 G's
Durability .....	Passed MIL-STD-1344, Method 2016, 50 cycles
Solderability .....	Passed MIL-STD-202F, Method 208
Insertion Force .....	Above 150 pins - 37 Grams (1.3 oz.) average with SUPERLIF™ a .018" (0,46) dia. polished steel pin
Insertion Force .....	Below 150 pins - 50 Grams (1.7 oz.) average with LIF a .018" (0,46) dia. polished steel pin
Withdrawal Force .....	Above 150 pins - 15 Grams (.52 oz.) average with SUPERLIF™ a .018" (0,46) dia. polished steel pin
Withdrawal Force .....	Below 150 pins - 20 Grams (.70 oz.) average with LIF a .018" (0,46) dia. polished steel pin

### ELECTRICAL

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

### ENVIRONMENTAL

Humidity .....	Passed MIL-STD-1344, Method 1002, Type II
Operation Temperature ..	Gold inner contact -55°C to +125°C Tin/lead inner contact -55°C to +105°C



**TABLE 1 - SLEEVE TYPES**

Butt Style Floating Sleeves			
	Designation	Pitch	A
PGA	F	.100 (2,54)	.029 (0,736)
IPGA	C	050 x .100 (1,27 x 2,54)	.025 (0,635)

**INSULATOR DIMENSIONS**

Insulator Size	A	B	Insulator Size	A	B
9 X 9	.950 (24,13)	.800 (20,32)	18 X 18	1.850 (46,99)	1.700 (43,18)
10 X 10	1.050 (26,67)	.900 (22,86)	19 X 19	1.950 (49,53)	1.800 (45,72)
11 X 11	1.150 (29,21)	1.000 (25,40)	20 X 20	2.050 (52,07)	1.900 (48,26)
12 X 12	1.250 (31,75)	1.100 (27,94)	21 X 21	2.150 (54,61)	2.000 (50,80)
13 X 13	1.350 (34,29)	1.200 (30,48)	22 X 22	2.250 (57,15)	2.100 (53,34)
14 X 14	1.450 (36,83)	1.300 (33,02)	23 X 23	2.350 (59,69)	2.200 (55,88)
15 X 15	1.550 (39,37)	1.400 (35,56)	24 X 24	2.450 (62,23)	2.300 (58,42)
16 X 16	1.650 (41,91)	1.500 (38,10)	25 X 25	2.550 (64,77)	2.400 (60,96)
17 X 17	1.750 (44,45)	1.600 (40,64)			

**TABLE 2 - PLATING FINISHES**

Plating Designation	Contact Plating	Sleeve Plating
1	Gold	Tin/Lead
3	Tin/Lead	Tin/Lead
7	Low Gold	Tin/Lead

Dimensions listed are nominal

**POPULAR PIN GRID ARRAY FOOTPRINTS / ORDERING INFORMATION**

INTEL		MOTOROLA		MOTOROLA	
80286	GSM068-1F1132-V	MC68000	GSM068-1F1006-V	MC68461	GSM149-1F1517-V
80386	GSM132-1F1414-V	MC68010	GSM068-1F1006-V	MC68012	GSM084-1F1003-V
80486	GSM168-1F1715-V	MC68020	GSM114-1F1345-V	MC68605	GSM084-1F1002-V
80486SX	GSM169-1F1708-V	MC68030	GSM128-1F1359-V	MC68824	GSM084-1F1002-V
PENTIUM #3	GSM237-1F1925-V	MC68040	GSM179-1F1818-V	MC68851	GSM132-1F1357-V
PENTIUM #2	GSM238-1F1916-V	MC68440	GSM068-1F1006-V	MC68881	GSM068-1F1006-V
PENTIUM #5	GSM320-1C37A7-V	MC68450	GSM068-1F1006-V	MC68882	GSM068-1F1006-V
		MC68850	GSM068-1F1006-V	MCAL200ECL	GSM072-1F1123-V
		MC68451	GSM068-1F1006-V		

**HOW TO ORDER**

**G S M** 


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 - **V**

Number of Contacts      Sleeve Type (Table 1)      Grid size      Plating Options (Table 2)      Footprint Options (Page D23)      Low Force, Six Finger Contact

Part Number Example: GSM169-1F1708-V

**Need more technical information?**  
 Consult your Thomas & Betts sales office listed on the back cover

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