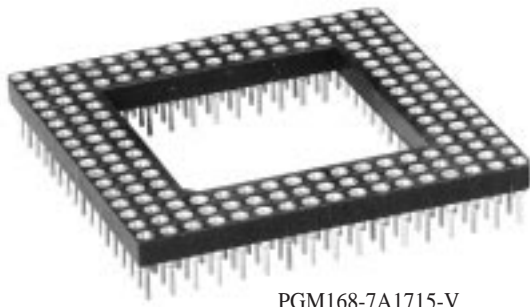
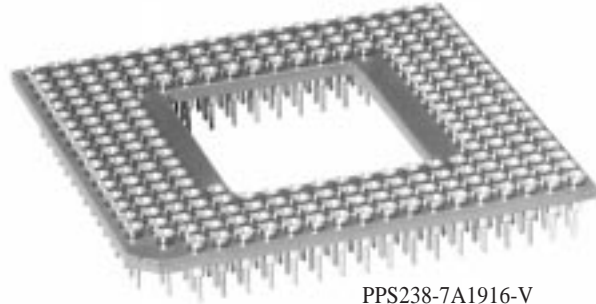


PGM & PPS Series *Pin Grid Array Sockets*



PGM168-7A1715-V



PPS238-7A1916-V

FEATURES:

- LIF & SUPERLIF™ Low insertion and withdrawal force contacts
- Non-wicking closed bottom, precision sleeve protects 100% against flux and solder contamination
- Custom design capabilities
- Available in molded plastic (PGM) and glass epoxy (PPS) insulators
- Recognized under the Component Program of Underwriters Laboratories, Inc. File E111362
- High temperature insulators allow the sockets to be soldered with vaporphase and infrared reflow soldering process

MATERIAL SPECIFICATIONS:

Insulator	Thermoplastic polyester or glass epoxy, UL rated 94V-0
Sleeve	Machined brass/formed copper
Contact	Beryllium copper
Sleeve Plating	See Table 1
Contact Plating	See Table 1

PERFORMANCE SPECIFICATIONS:

MECHANICAL

Vibration	Passed MIL-STD-1344, Method 2005.1, Condition V, D, 11.6 G's (RMS)
Shock	Passed MIL-STD-1344, Method 2004.1, 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 VDC per MIL-STD-1344, Method 3003.1
Dielectric Withstanding Voltage	1,000 Volts RMS per MIL-STD-1344, Method 3001.1

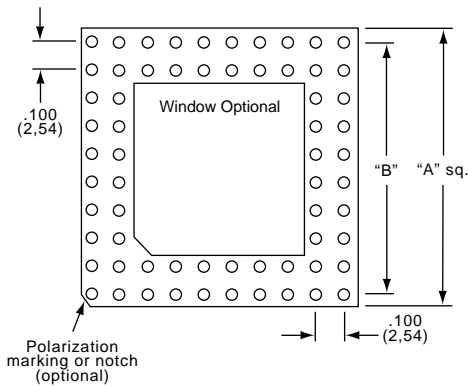
ENVIRONMENTAL

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
Thermal Shock	Passed MIL-STD-1344, Method 1003.1, Cond. A

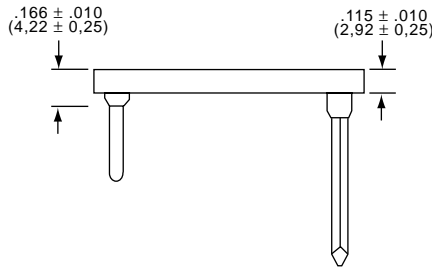
HOW TO ORDER

P □ □ □ □ □ — □ □ □ □ □ — V
Number of Contacts
Plating Options (Table 1)
Pin Selection (Table 2)
Grid size
Footprint Options (Pg. D23)
Low Force, Six Finger Contact
Part Number Example: PGM068-1A1132-V
GM - Molded Thermoplastic Polyester PS - Glass Epoxy SM - Molded Standoffs (refer to fig. 1)

Pin Grid Array Sockets PGM & PPS Series



MOLDED INSULATOR



Note: Head of sleeve is recessed in .030" counter bore

GLASS EPOXY INSULATOR



Note: Head of sleeve sits above insulator

TABLE 1 - PLATING FINISHES

Plating Designation	Sleeve Type	Contact Plating	Sleeve Plating
1 2 3 7	PC Tails	Gold Gold Tin/Lead Low Gold	Tin/Lead Gold Tin/Lead Tin/Lead
4 5 6	Solderless Wrap *	Gold Gold Tin/Lead	Tin/Lead Gold Tin/Lead

* Solderless Wrap available only in molded thermoplastic insulator.

TABLE 2 - SLEEVE TYPES

PC Tails		Solderless Wrap*	
Designation	"X" Dimension	Designation	"X" Dimension
A	.125" (3,17)		
B	.180" (4,57)	D	.510" (12,95)

INSULATOR DIMENSIONS

Insulator Size	"A"		"B"
	Molded Insulators	Glass Epoxy Insulators	
9 X 9	.90	.950	.800
10 X 10	1.00	1.050	.900
11 X 11	1.10	1.150	1.000
12 X 12	1.20	1.250	1.100
13 X 13	1.30	1.350	1.200
14 X 14	1.40	1.450	1.300
15 X 15	1.50	1.550	1.400
16 X 16	1.60	1.650	1.500
17 X 17	1.70	1.750	1.600
18 X 18	1.80	1.850	1.700
19 X 19	1.90	1.950	1.800
20 X 20	2.00	2.050	1.900
21 X 21	2.10	2.150	2.000
22 X 22	N/A	2.250	2.100
23 X 23	N/A	2.350	2.200
24 X 24	N/A	2.450	2.300
25 X 25	N/A	2.550	2.400

Dimensions listed are nominal

Need more technical information?

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

