

1.00MM PITCH

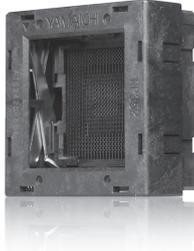
SERIES NP352 / NP483 / NP486 (OPEN TOP - TH) BGA / CSP

SPECIFICATIONS

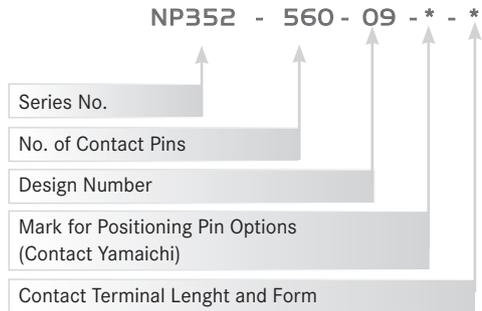
Insulation Resistance:	1,000MΩ min. at 100V DC
Dielectric Withstanding Voltage:	100V AC for 1 minute
Contact Resistance:	100mΩ max. at 10mA/20mV max.
Operating Temperature Range:	-55°C to +170°C
Contact Force:	15g per pin approx.
Mating Cycles:	10,000 insertions

MATERIALS AND FINISH

Housing:	Polyetherimide (PEI), glass-filled Polyethersulphone (PES), glass-filled
Contacts:	Beryllium Copper (BeCu)
Plating:	Gold over Nickel



PART NUMBER



FEATURES

- Secure package alignment due to self contacting structure without upper pressing force(ZIF)
- Contacting structure to nip the sides of solder balls to lower damages of coplanarity of solder balls

SERIES IC280 (CLAMSHELL - TH) BGA / CSP / LGA

SPECIFICATIONS

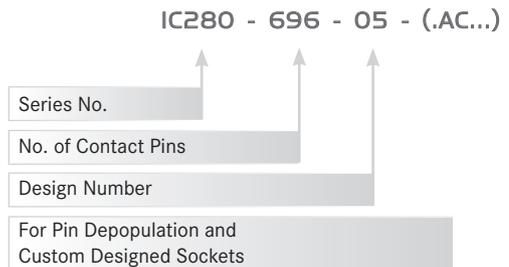
Insulation Resistance:	1,000MΩ min. at 100V DC
Dielectric Withstanding Voltage:	700V AC for 1 minute for 1.00mmpitch 500V AC for 1 minute for 0.80mm pitch 100V AC for 1 minute for 0.75mm pitch
Contact Resistance:	100mΩ max. at 10mA/20mV max.
Operating Temperature Range:	-40°C to +150°C
Contact Force:	15g to 35g per pin within contact travel distance between 0.2 to 0.5mm
Mating Cycles:	10,000 insertions

MATERIALS AND FINISH

Housing:	Polyetherimide (PEI), glass-filled Polyethersulphone (PES), glass-filled
Contacts:	Beryllium Copper (BeCu)
Plating:	Gold over Nickel



PART NUMBER

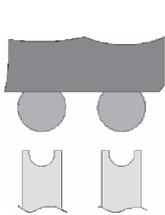


FEATURES

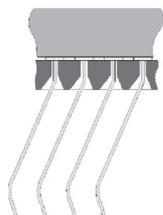
- V-shape contact structure to lower the damage of coplanarity of solder balls
- Available in 3 pitch sizes and various depopulation versions, please contact Yamaichi for further available pin counts or custom sockets

CONTACTING TYPES FOR ALL SERIES

Since the solder balls are touched by two contacts on each side, the solder ball damage can be minimized; additional features are low actuation force and compact socket size



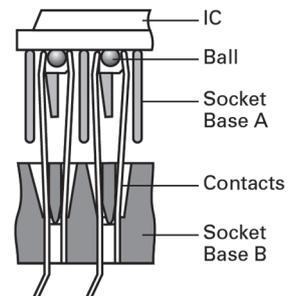
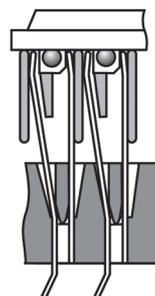
U-Shape Style (BGA)



Bow Style (LGA)

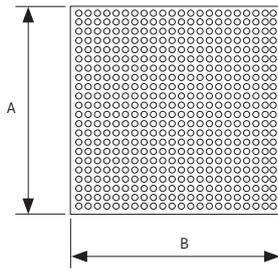


Yamaichi's 2-point Tweezer Style Contact

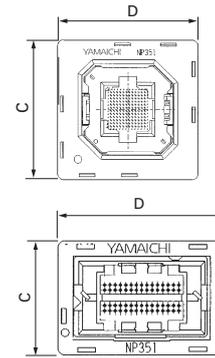
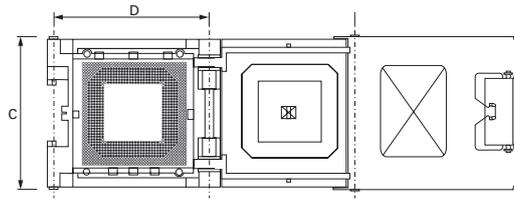


1.00MM PITCH

TYPICAL IC PACKAGE SIZE



OUTLINE SOCKET DIMENSIONS

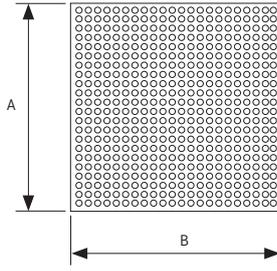


Part Number	Pin Count	Grid Size	Package Size A x B	Socket Dimensions C x D	Lid Type
NP352-04811	48	6 x 8	10 x 14	24.4 x 28.0	OT
NP352-04813	48	6 x 8	11 x 14	24.4 x 28.0	OT
NP352-100-220	52	8 x 11	12 x 18	26.0 x 22.4	OT
NP352-165-109-1	165	11 x 15	13 x 15	23.6 x 29.9	OT
NP352-165-137	165	11 x 15	15 x 17	23.6 x 29.9	OT
NP352-196-125	196	14 x 14	15 x 15	31.4 x 34.0	OT
NP352-208-200	208	16 x 16	17 x 17	39.0 x 39.0	OT
NP352-256-81-*	256	16 x 16	17 x 17	39.0 x 39.0	OT
NP486-268-045	268	20 x 20	21 x 21	47.0 x 47.0	OT
NP486-288-010	288	22 x 22	23 x 23	47.0 x 47.0	OT
NP486-320-028	320	20 x 20	21 x 21	47.0 x 47.0	OT
NP352-324-116	324	18 x 18	19 x 19	47.0 x 47.0	OT
NP352-98 AC-30689	324	22 x 22	23 x 23	62.0 x 62.0	OT
NP352-34534	345	21 x 21	23 x 23	62.0 x 62.0	OT
NP352-103 AC-29401	352	26 x 26	27 x 27	47.0 x 47.0	OT
NP352-98 A106677-001	379	22 x 22	23 x 23	62.0 x 62.0	OT
NP352-103 AC-29397	388	26 x 26	27 x 27	47.0 x 47.0	OT
NP352-98 A102213-002	388	22 x 22	23 x 23	62.0 x 62.0	OT
NP486-388-030	388	26 x 26	27 x 27	47.0 x 47.0	OT
NP352-40025	400	29 x 29	31 x 31	62.0 x 62.0	OT
NP352-400-40	400	25 x 25	27 x 27	62.0 x 62.0	OT
NP483-416-062	416	30 x 30	31 x 31	47.0 x 47.0	OT
NP486-416-035	416	26 x 26	27 x 27	47.0 x 47.0	OT
NP352-432-44	432	25 x 25	27 x 27	62.0 x 62.0	OT
NP352-436-68	436	33 x 33	35 x 35	62.0 x 62.0	OT
NP352-456-66	456	26 x 26	27 x 27	62.0 x 62.0	OT
NP352-48031	480	29 x 29	31 x 31	62.0 x 62.0	OT
NP352-484-87-*	484	26 x 26	31 x 31	47.0 x 47.0	OT
NP352-484-98	484	22 x 22	23 x 23	62.0 x 62.0	OT
NP486-484-021	484	22 x 22	23 x 23	47.0 x 47.0	OT
NP486-484-040	484	26 x 26	27 x 27	47.0 x 47.0	OT
NP486-516-020	515	26 x 26	27 x 27	47.0 x 47.0	OT
NP486-520-032	520	26 x 26	27 x 27	47.0 x 47.0	OT
NP486-544-027	544	26 x 26	27 x 27	47.0 x 47.0	OT
NP483-561-042	561	27 x 27	29 x 29	47.0 x 47.0	OT
NP352-568-195	568	30 x 30	31 x 31	50.0 x 50.0	OT
NP352-115523 AC-20603	580	34 x 34	35 x 35	62.0 x 62.0	OT
NP486-596-026	596	26 x 26	27 x 27	47.0 x 47.0	OT
NP352-64819	648	33 x 33	35 x 35	62.0 x 62.0	OT
NP483-648-039	648	33 x 33	35 x 35	47.0 x 47.0	OT
NP352-659-209	659	30 x 30	31 x 31	50.0 x 50.0	OT
NP352-78832.AC-19367	660	38 x 38	40 x 40	62.0 x 62.0	OT
IC280-69605.AC-08327	671	34 x 34	35 x 35	56.20 x 54.90	DL
NP352-676-103	676	26 x 26	27 x 27	47.0 x 47.0	OT
NP352-115523.AC-22615	680	34 x 34	35 x 35	62.0 x 62.0	OT
NP352-152124 AC-19435	680	39 x 39	40 x 40	62.0 x 62.0	OT
IC280-69605	696	38 x 38	40 x 40	56.20 x 54.90	DL
IC280-720-106	720	38 x 38	40 x 40	56.20 x 54.90	DL
NP352-724-95	724	34 x 34	35 x 35	62.0 x 62.0	OT

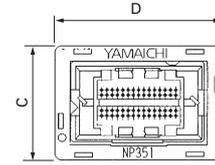
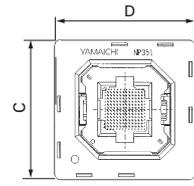
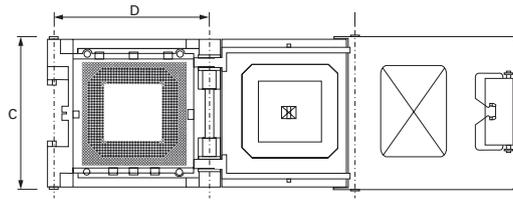
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OUTLINE SOCKET DIMENSIONS



Part Number	Pin Count	Grid Size	Package Size A X B	Socket Dimensions C x D	Lid Type
IC280-72918	729	27 x 27	28 x 28	46.80 x 47.60	DL
NP352-736-172	736	34 x 34	35 x 35	62.0 x 62.0	OT
NP352-87-1-1.AC-28845	764	30 x 30	31 x 31	47.0 x 47.0	OT
NP483-780-045-*	780	28 x 28	29 x 29	62.0 x 62.0	OT
NP352-78832	788	38 x 38	40 x 40	62.0 x 62.0	OT
NP352-152124.AC-25245	792	39 x 39	40 x 40	62.0 x 62.0	OT
NP352-829-133	829	39 x 39	40 x 40	62.0 x 62.0	OT
NP483-844-061	844	34 x 34	35 x 35	62.0 x 62.0	OT
IC280-868-108	868	38 x 38	40 x 40	54.90 x 50.90	DL
NP352-888-58	888	43 x 43	45 x 45	74.0 x 74.0	OT
NP483-899-022	899	30 x 30	32 x 32	62.0 x 62.0	OT
NP352-87 A101832-002	900	30 x 30	31 x 31	50,0 x 50,0	OT
NP483-900-025	900	30 x 30	31 x 31	62.0 x 62.0	OT
NP483-933-057-*	933	33 x 33	35 x 35	62.0 x 62.0	OT
NP352-115523 A101400-001	980	32 x 32	33 x 33	62.0 x 62.0	OT
NP352-1008-39	1008	43 x 43	45 x 45	74.0 x 74.0	OT
NP352-106426-*	1064	43 x 43	45 x 45	74.0 x 74.0	OT
NP352-115523	1155	34 x 34	35 x 35	62.0 x 62.0	OT
NP352-76814 AC-20629	1280	38 x 38	40 x 40	62.0 x 62.0	OT
NP352-1296-52	1296	36 x 36	37.5 x 37.5	74.0 x 74.0	OT
NP352-53 A101407-001	1397	39 x 39	40 x 40	62.0 x 62.0	OT
NP483-1444-034-1	1444	38 x 38	40 x 40	62.0 x 62.0	OT
NP483-1497-015	1497	39 x 39	40 x 40	62.0 x 62.0	OT
NP352-1521-53	1521	39 x 39	40 x 40	62.0 x 62.0	OT
NP483-1521-001	1521	39 x 39	40 x 40	62.0 x 62.0	OT
NP352-1600-54-*	1600	40 x 40	46 x 46	74.0 x 74.0	OT
NP483-1760-008-2	1760	42 x 42	42,5 x 42,5	74.0 x 74.0	OT
NP352-1849-35	1849	43 x 43	45 x 45	74.0 x 74.0	OT
NP483-1924-058	1924	44 x 44	45 x 45	74.0 x 74.0	OT
NP483-1936-060	1936	44 x 44	45 x 45	74.0 x 74.0	OT
NP483-2116-014-1	2116	46 x 46	47.5 x 47.5	74.0 x 74.0	OT
NP483-2209-003	2209	47 x 47	50 x 50	74.0 x 74.0	OT

Mouser Electronics

Authorized Distributor

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