38999-Type Double-Flange PCB Receptacles

Panel flange + PCB flange · 17 mm spacing · 50 PCB layouts



Coupling	Bayonet (Series I) or threaded (Series III)
Shell sizes	9 to 25
Insert arrangements	50 PCB layouts
Contact sizes	22D to 16 (5–13 A)
Temperature	–65 to +200 °C
Flange spacing	17 mm

Key features

- Two flanges: one to the panel, one to the circuit board, 17 mm apart
- PCB pin or socket contacts in sizes 22D, 20 and 16
- JY27505E-D17 mates with JY27467T Series I bayonet plugs; J599/20-D17 and -E17 mate with J599/26 Series III threaded plugs
- M3 threaded inserts (D17) or M3 threaded holes (E17) for fixing
- Marine versions: 240 h acid salt spray (pH 3.5) and 84-day mold resistance
- PCB hole coordinates supplied for every layout

Specifications

Electrical

Parameter	Value	Condition
Dielectric withstanding voltage, service rating M	1300 / 550 Vrms	Sea level / 15,240 m
Dielectric withstanding voltage, service rating N	1000 / 400 Vrms	Sea level / 15,240 m
Dielectric withstanding voltage, service rating I	1800 / 600 Vrms	Sea level / 15,240 m
Dielectric withstanding voltage, service rating II	2300 / 800 Vrms	Sea level / 15,240 m
Dielectric withstanding voltage at 30,480 m	200 Vrms	All ratings
Insulation resistance	≥ 5000 MΩ	Room temperature
Insulation resistance	≥ 1000 MΩ / ≥ 100 MΩ	High temperature / humidity

Mechanical

Parameter	Value	Condition
Durability	500 mating cycles	
Shock	300 g, half-sine, 3 ms	
Sine vibration	10–2000 Hz, 30 g, 3 × 4 h	JY27505E-D17

Mechanical		
Parameter	**Value**	**Condition**
Sine vibration	10–2000 Hz, 60 g (140–2000 Hz), 3 × 12 h	J599/20-D17, -E17, with temperature cycling
Random vibration	50–2000 Hz, 1 g²/Hz (100–2000 Hz), 2 × 8 h	
Random vibration	25–2000 Hz, 5 g²/Hz (100–300 Hz), 2 × 8 h	
Recommended PCB hole	Ø 0.90 mm (22D, 20); Ø 1.30 mm (16)	

Environmental		
Parameter	**Value**	**Condition**
Operating temperature	–65 to +200 °C	–65 to +175 °C for cadmium finish
Salt spray	48–1000 h	Depends on finish; 1000 h titanium
Acid salt spray	240 h, pH 3.5 ± 0.5	Marine versions
Acid atmosphere	28 days, pH 3.5 ± 0.5	Marine versions
Mold resistance	Grade 2, 28 days / grade 1, 84 days	Standard / marine
Operating altitude	≤ 30,480 m	

Versions

Series code	Version	Notes
JY27505E…-D17	Series I bayonet, double flange, M3 threaded inserts	Mates with JY27467T plugs
J599/20…-D17	Series III threaded, double flange, M3 threaded inserts	Mates with J599/26 plugs
J599/20…-E17	Series III threaded, double flange, M3 threaded holes	Mates with J599/26 plugs
…M…	Marine version	Finishes B, E, TA (Series I) or W, K, TA (Series III)

Shell materials and finishes

Code	Shell material	Finish	Shell conductivity	EMI shielding	Temperature	Salt spray
F	Aluminum alloy	Nickel	≤ 1 mΩ	50–65 dB at 10 GHz; 85 dB at 1 GHz	–65 to +200 °C	48 h
B / W	Aluminum alloy	Olive-drab cadmium	≤ 2.5 mΩ	50 dB at 10 GHz; 85 dB at 1 GHz	–65 to +175 °C	500 h
E / K	Stainless steel	Passivated	≤ 50 mΩ (E) / ≤ 10 mΩ (K)	— / 45 dB at 10 GHz	–65 to +200 °C	500 h
S	Stainless steel	Nickel	≤ 1 mΩ	65 dB at 10 GHz	–65 to +200 °C	48 h
TA	Titanium alloy	None	≤ 10–50 mΩ	— / 45 dB at 10 GHz	–65 to +200 °C	1000 h

Contact sizes and current ratings

Contact size	Engaging diameter	Contact resistance	Current rating	Contact retention
22D	0.76 mm	≤ 14.6 mΩ	5 A	44 N
20	1.02 mm	≤ 7.3 mΩ	7.5 A	67 N
16	1.58 mm	≤ 3.7 mΩ	13 A	111 N

How to order

[series] [marine] [finish] [shell] [arrangement] [contact] [key] -[flange][spacing]

Example: **J599/20WD35PN-E17** — Series III threaded double-flange receptacle, olive-drab cadmium, shell D (size 15), arrangement 15-35, PCB pin contacts, key N, M3 threaded holes, 17 mm flange spacing

Code segment	Options
Series	**JY27505E** Series I bayonet, box-mount rear (shell 09–25)
Series	**J599/20** Series III threaded, square flange (shell A–J)
Marine	**(none)** Standard
Marine	**M** Marine version
Finish	**F, B / W** Aluminum — nickel, olive-drab cadmium
Finish	**E, K, S** Stainless steel
Finish	**TA** Titanium alloy
Arrangement	**e.g. 35** See the PCB layout table below
Contact	**PC / SC** PCB pin / PCB socket (also written P / S)
Key	**N** Normal
Key	**A B C D (E)** Alternate
Flange	**D17** M3 threaded inserts, 17 mm spacing
Flange	**E17** M3 threaded holes, 17 mm spacing (J599/20)

Series I example: JY27505E15B35PCN-D17. Other insert arrangements and flange spacings on request.

Insert arrangements

Arrangement	Contacts	Contact sizes	Service rating
9-03	3	3 × size 20	I
9-35	6	6 × size 22D	M
9-98	3	3 × size 20	I
11-02	2	2 × size 16	I
11-04	4	4 × size 20	I
11-05	5	5 × size 20	I
11-35	13	13 × size 22D	M
11-98	6	6 × size 20	I
11-99	7	7 × size 20	I
13-03	3	3 × size 16	II

Arrangement	Contacts	Contact sizes	Service rating
13-04	4	4 × size 16	I
13-08	8	8 × size 20	I
13-35	22	22 × size 22D	M
13-98	10	10 × size 20	I
15-05	5	5 × size 16	II
15-15	15	1 × size 16, 14 × size 20	I
15-18	18	18 × size 20	I
15-19	19	19 × size 20	I
15-35	37	37 × size 22D	M
15-97	12	4 × size 16, 8 × size 20	I
17-08	8	8 × size 16	II
17-26	26	26 × size 20	I
17-35	55	55 × size 22D	M
17-99	23	2 × size 16, 21 × size 20	I
19-11	11	11 × size 16	II
19-28	28	2 × size 16, 26 × size 20	I
19-30	30	1 × size 16, 29 × size 20	I
19-32	32	32 × size 20	I
19-35	66	66 × size 22D	M
19-45	67	67 × size 22D	M
21-16	16	16 × size 16	II
21-24	24	24 × size 20	I
21-25	25	25 × size 20	I
21-27	27	27 × size 20	I
21-35	79	79 × size 22D	M
21-39	39	2 × size 16, 37 × size 20	I
21-41	41	41 × size 20	I
23-32	32	32 × size 20	I
23-34	34	34 × size 20	I
23-35	100	100 × size 22D	M
23-36	36	36 × size 20	I
23-53	53	53 × size 20	I
23-55	55	55 × size 20	I
23-97	16	16 × size 16	I
23-99	11	11 × size 16	II
25-04	56	8 × size 16, 48 × size 20	I
25-29	29	29 × size 16	I

Arrangement	Contacts	Contact sizes	Service rating
25-35	128	128 × size 22D	M
25-43	43	20 × size 16, 23 × size 20	I
25-61	61	61 × size 20	I

Standards

- **GJB 599A Series I / GJB 599B Series III** — Mating interface of the corresponding series.

Request a quote or drawing: https://sinoxh.com/request-a-quote/?product=Double-flange%20PCB%20receptacles