


Technical Specification for PV MC4 Connector

Connector Type	
Copper-Aluminium PV Connector	
Application	
Solar photovoltaic system	
Standard	
EN 62852:2015	

Wiring Specification	Aluminium Conductor 6 mm ²	Core Material	Copper-Aluminium Combination
Electrical Characteristics			
Rated Voltage	1500V DC	Ambient Temperature	-40°C to +85°C
Rated Impulse Voltage	8000V	Matching Connector	MC4
Rated Insulation Voltage	6000V	Insulation Material	PPO
Rated Current	30A	Contact Material	Tin-plated copper
Protection Degree	IP68	Flame Class	UL94-V0
Contact Resistance	≤ 0.5 mΩ	Trademark	

Product Name	Copper-Aluminium PV Connector	Report No.	YS20250817-000
Model	YSP-CuAl0406	Quantity	2000 sets
Inspection Method	Sampling Inspection		

No.	Inspection Item	Standard Requirement	Result	Judgement
1	Contact resistance	≤ 0.5 mΩ	Passed	Qualified
2	Connector locking	Clip locks in place; no missing assembly	Passed	Qualified
3	Connector appearance	Smooth surface; no damage or deformation	Passed	Qualified
4	Connector self-locking performance	≥ 200 N	Passed	Qualified
5	Connector withstand voltage	DC 6.5 kV, 60s; no breakdown	Passed	Qualified
6	Connector assembly	Smooth plug-in and pull-out; no jamming	Passed	Qualified
7	Protection degree	IP67	Passed	Qualified
8	Positive/negative pole matching	Rotate 90°; no separation	Passed	Qualified
9	Appearance	Smooth appearance; no machine damage, burrs or deformation; O-ring intact; positive/negative pole identification clear	Passed	Qualified
10	Packaging	Specification, model, and quantity markings are clear	Passed	Qualified