Part Number		Snap-in M6 Connector Panel & Cable End Engineering Specifications						
		Specifications		(REV.)	(DATE)	(PREPARED)	(APPROVED)	
Current Rating		2.0A		01	2017/7/17	Hank	Lucas	
AWG Gauge		24 AWG						
Operation temperature		With Cable -40°C / +85°C						
		Without Cable -40°C / +105°C						
IP Rating		IP 67						
Number Of Ways	Male Face View		Female Face View	AWG Gauge	Voltage	Amps		
5				24AWG	30V	2A		
6				24AWG	30V	2A		

Material				
Male/Female Housing Panel	PA66			
Male/Female Housing Cable End	PA66			
Male/Female Contacts	Copper Alloy, Au Plated			
Panel Hex Nut	Copper Alloy			
Panel O-Ring	Silicone			
Glue	Ероху			
Over Mold	TPU			

Product Technical Data						
Characteristics	Standard	Description				
Visual and Dimensional Inspection	EIA 364-18	Must meet or exceed the requirements specified by the most current version of the Snap-in M6 Specification.				
Insulation Resistance EIA 364-21 or IEC 60512-3a		$DC500V{\pm}10\%$, test for 1 minute and the insulation resistance should be more than $100M\Omega$				
Dielectric Withstanding Voltage	EIA 364-20 or IEC 60512-4a	500V AC contact-to-contact, for 1min.				
Contact Resistance EIA 364-23 or IEC 60512-2b		$10 \text{m}\Omega$ at 100mA Max.				
Durability	EIA 364-09 or IEC 60512-9a	Snap-in type 2000 cycles ,rate of 250 cycles per hour.				
Cable Pull-Out EIA 364-38 Test Condition or IEC 60512-13a		After the application of a steady state axial load of 222 N for 1 hour				
Cable Flexing EIA 364-41		A traverse 180° in one direction plus 180° in the opposite direction shall be called one cycle, the cycling rate shall be 12 to 14 cycles per minute. After completion of 100 cycles, test withstanding voltage and insulation resistance				
Physical Shock EIA 364 27 Test Condition H or IEC 60512-6c		No discontinuities of 1 μ s or longer duration when mated Snap-in M6 connectors are subjected to 11 ms duration 30 Gs half-sine shock pulses. Three shocks in each direction applied along three mutually perpendicular planes for a total of 18 shocks.				
Random Vibration EIA 364-28 or IEC 60512-6d		The electrical load conditions shall be 100mA maximum for all contacts. Frequency: 50 to 2000 Hz PDS: 0.04 g ² /Hz. Duration: 1 Hour/Axis, 3 Axes Total. g's: 7.56 g rms				
Thermal Shock EIA 364-32 Test Condition VIII or IEC 60512-11d		5 cycles at -40°C / +105°C , after the test, the function and appearance can't be impacted.				

Salt Spray	EIA 364-26 or IEC 60512-11f	The test liquid (Nacl) thickness is 5%, Compressing the air pressure is 0.083Mpa, Spraying amount is 0.5~3.0ml/ $80cm^2$ / hours , Temperature of the pressure barrel is $43^{\circ}C$, LAB temperature is $35^{\circ}C$, relative humidity of LAB is 95%~98%, test time is 48hr, after the test, check if there is rusty and oxidized phenomenon
Waterproof Test IEC 60529		Under 1 M water for 30 min.
Temperature Life W/O Electrical Load	EIA364-17 Condition 3 or IEC 60512-9b	80°C for 96 Hours .
Low Temperature	EIA364-59 Condition 3 or IEC 60512-11k	-20°C for 96 Hours
Temperature Humidity Cycling	EIA 364-31 , Method III Test Condition A	4 cycles at 25°C / +65°C 95%RH, Test time condition A 96Hours.