

### Design Objective

*This product described in this document has not been fully tested to insure conformance to the requirements outlined below. Therefore, AMP do Brasil makes no representation or warranty, express or implied, that the product will comply with these requirements. Further, AMP do Brasil may change these requirements based on the results of additional testing and evaluation. Contact AMP Engineering for further details.*

## 1. SCOPE

### 1.1 Content

This specification covers the performance, tests and quality requirements for the AMP Housing 8 position Junior Power Timer Receptacle for the mirror control.

## 2. REFERENCE DRAWINGS/SPECIFICATIONS

- 2.1 Housing 8p Jr. Power Timer Rec. no. C-881647
- 2.2 Jr. Power Timer Rec. (0,5-1,0mm<sup>2</sup>) no. C-927771
- 2.3 Jr. Power Timer Rec. (1,5-2,5mm<sup>2</sup>) no. C-927768
- 2.4 Product Specification, Jr. Power Timer no. 108-18013

## 3. MATERIALS

- 3.1- **Contacts** Pre-tinned bronze  
Stainless steel for the spring
- 3.2- **Housing** P.A. 6.6

## 4. RATINGS

- 4.1 Temperature : - 40°C to 80°C
- 4.2 Maximum working current : 30A
- 4.3 Cable Range and Test Current :

Contact P/N	Contact Description	Wire Range (mm <sup>2</sup> )	Insulation Diameter (mm)	Test Current	
				Wire Size (mm <sup>2</sup> )	Current (A)
927771	Jr. Power Timer Rec.	0,5 - 1,0	1,4 - 2,1	0,5	6
				1,0	11
927768	Jr. Power Timer Rec.	1,5 - 2,5	2,2 - 3,0	1,5	14
				2,5	20

Table 1

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## 5. PERFORMANCE AND TEST DESCRIPTION

The product is designed to meet the electrical , mechanical and environmental performance requirements specified below . All tests are performed at ambient environmental conditions , unless otherwise specified .

Test Items	Requirements	Procedures	
Examination of Product	Meet requirements of reference drawings	Visual, dimensional and functional per reference drawings.	
Voltage Drop	3m V/A max.	Measure millivolt drop of contact test in mated connectors, Figure 1. See table 1 for test current.	
Termination Resistance	3M $\Omega$ max.	Subject mated contacts assembled in housing to closed circuit current of 100 mA max. at open circuit of 20mV max.	
Dielectric Withstanding Voltage	No break-down or flash-over when 1KVAC is applied for one minute	Test between adjacent contacts of unmated connectors.	
Insulation Resistance	200M $\Omega$ min.	Test between adjacent contacts of unmated connectors. Test voltage 500V DC.	
Current Cycling	- Temperature Rise : 50 $^{\circ}$ C max. - Termination Resistance	Subject contacts to 500 cycles at test current for 45 minutes "on" and 15 minutes "off".	
Mating Force	160N max.	Measure force necessary to mate connector assembly at rate of 25mm/min.	
Unmating Force	160N max.	Measure force necessary to unmated connector assembly at rate of 25mm / min.	
Contact Retention	200N min.	Measure contact retention force, with secondary lock set in effect, at rate of 25mm/min.	
Crimp Tensile	Wire Size mm <sup>2</sup>	Force N(min.)	
	0,5		60
	1,0		100
	1,5		150
	2,5	200	
Thermal Shock	- No visual damage - Voltage drop, Dielectric Withstanding Voltage and Insulation Resistance according to requirements	Subject mated connectors to 5 cycles of : - 2h at + 125 $^{\circ}$ C - 2h at +40 $^{\circ}$ C 90-98% humidity - 2h at -40 $^{\circ}$ C	
Salt Spray	- Voltage drop and Termination Resistance max. 200% of new contact value	Subject mated connectors to 5% Na Cl concentration for 96 hours , spec. 109-24 , test condition "A".	
Vibration	- No discontinuities greater than 1 micro second. - Voltage drop according to requirements	Subject mated connectors to frequency range between 10 to 500 Hz and back to 10 Hz with speed equal to one octave per minute. Subject to a simple harmonic motion to 25G, 2 hours in each of 3 mutually perpendicular planes.	

## 6. QUALITY ASSURANCE PROVISIONS

### 6.1 Qualification Testing

Connector housings and contacts shall be prepared in accordance with applicable Instruction Sheets They shall be selected at random from current production . Each group of the sample contacts shall consist of more than 5 sets of connectors .

**6.2 Requalification Testing**

If changes significantly affecting form , fit or function are made to the product or to the manufacturing process , product assurance shall coordinate requalification testing consisting of all or part of the original testing sequence as determined by Product Engineering .

**6.3 Acceptance**

Acceptance is based on verification that the product meets the requirements of this specification . Failures attributed to equipment , test set-up or operator deficiencies shall not disqualify the product . When product failure occurs , corrective action shall be taken and samples resubmitted for qualification . Testing to confirm corrective action is required before resubmittal.

**6.4 Quality Conformance Inspection**

The applicable AMP Quality Inspection Plans will specify the sampling acceptable quality level to be used . Dimensional and functional requirements shall be in accordance with the applicable product drawing and this specification .

**7. TEST CONDITIONS**

All tests shall be performed at the following environmental conditions , unless otherwise specified .

Temperature : 15 - 35° C  
 Relative Humidity : 45 - 75%  
 Atmospheric Pressure : 650 ~ 800mm HG

<b>Revision Record</b>
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Revision	Date	Description
0	17-Aug-95	Release