



PRODUCT SPECIFICATION

MALE CRIMP TERMINAL

1.0 SCOPE

This Product Specification covers the crimp terminal 70021-**** used with housings 70066-**** and 70107-****.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

70021 Male, Crimp Terminal

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

2.2.1 For information on dimensions see the individual sales drawings.

2.2.2 Material: High strength copper alloy

2.2.3 Plating

2.2.3.1 *Tin*: 3.81 micrometers/150 microinches minimum tin plate overall over nickel underplate overall

2.2.3.2 *30 Gold*: 0.76 micrometers/30 microinches minimum gold plate in contact area; 1.91 micrometers/75 microinches minimum tin plate in crimp area; over nickel underplate overall

2.2.3.3 *15 Gold*: 0.38 micrometers/15 microinches minimum gold plate in contact area; 1.91 micrometers/75 microinches minimum tin plate in crimp area; over nickel underplate overall

2.2.3.4 *Tin-Sel*: 3.81 micrometers/150 microinches minimum tin plate in contact area; 1.91 micrometers/75 microinches minimum tin plate in crimp area; over nickel underplate overall

2.2.4 Mates with: Connector assemblies with terminals 70058-**** and 71851-**** female crimp, 70028-**** female IDT, and 40391-**** female FFC

2.2.5 Connector to accept wire range from 36 to 20 AWG. For recommended wire types and crimp heights, contact the Molex Inside Sales department.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 Mil. Std. 202

4.0 RATINGS

4.1 VOLTAGE & CURRENT

Dry Circuit: Open circuit voltage 20mV maximum

Short circuit current 20 mA maximum

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4.2 CURRENT AND APPLICABLE WIRES

AWG	Amps	AWG	Amps
36	0.2	28	1.2
34	0.3	26	1.8
32	0.5	24	3.0
30	0.7	22	3.0

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance @ Rated Current	Mate connectors: apply a maximum voltage of 20 mV at rated current.	10 milliohms MAXIMUM (change from initial)

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
2	Terminal Retention Force (in Housing)	Axial pullout force on the terminal in the housing at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.	17.79 N (4 lbf) MINIMUM retention force
3	Durability – Tin Plate	Mate connectors up to 25 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests.	10 milliohms MAXIMUM (change from initial)
4	Durability – 30µ In. Gold Plate	Mate connectors up to 1000 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests.	10 milliohms MAXIMUM (change from initial)

5.3 ENVIRONMENTAL REQUIREMENTS

Note: These Requirements apply to the 70021 terminal only

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	Shock (Thermal)	Mil Std. 202E, Method 107C, Condition A And Mil. Std. 202, Method 205, Condition A (15G)	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
6	Thermal Aging	Mate connectors; expose to: 168 hours at 105 ± 2°C	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
7	Humidity (Steady State)	Mil. Std. 202E, Method 103B, Condition A +40°C at 96% R.H. for 240 hours	10 milliohms MAXIMUM (change from initial) & Visual: No Damage

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Note: For Assembly (Housing / Terminal) environmental requirements see Product Specification PS-70400

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage. See Sales drawings for packaging specification.

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