Molex 75757-0441 PDF

深圳创唯电子有限公司 http://www.molex-connect.com

1.0 SCOPE

This specification covers the 3.50 mm (0.138 inch) MX150 Unshrouded header product line and is intended to mate with the MX150 receptacle connector series 33471 and 33472.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

A. Header Assembly
   I. Dual & Single Row Vertical Headers: 75757
   II. Dual Row, Right Angle: 75900

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

A. Header Housing - 30% glass filled LCP

B. Terminal - Brass Alloy C26000
   I. Plating Option 1 - Matte Tin 2.5µ MIN overall with 1.25 µ MIN Nickel under plate overall.

   II. Plating Option 2 - Select Gold 0.05µ MIN in contact area, Select Matte Tin 2.5 µ MIN in PC tail area, 1.25 µ MIN Nickel under plate overall.

   III. Plating Option 3 - Select Gold 0.50µ MIN in contact area, Select Matte Tin 2.5 µ MIN in PC tail area, 1.25 µ MIN Nickel under plate overall.

   IV. Plating Option 4 - Matte Tin 1.5µ MIN overall with 1.25µ MIN Nickel under plate overall.

2.2.1 Recommended PCB Thickness 0.062/(1.57)

2.3 SAFETY AGENCY APPROVALS

UL File Number	TBD
CSA File Number	TBD
TUV License Number	TBD

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 SPECIFICATIONS

All documents referenced shall be of the latest revision. The order of precedence detailing requirements of this specification is as follows:

1. Product Drawings 2. This Specification

3.2 REFERENCE DOCUMENTS

Molex Product Specification PS-33472-000, MX150 Dual Row Connector
Molex Product Specification PS-33471-000, MX150 Single Row Connector
Molex Application Specification AS-75757-210, MX150 Header Shroud Details

4.0 RATINGS

4.1 VOLTAGE

≤ 500 VDC

4.2 CURRENT

Ratings shown below represent maximum current carrying capacity of a fully loaded connector with all circuits powered. Ratings are based on a 30 °C maximum temperature rise limit over ambient (see section 5.1.4 for specification) without derating. Current is dependent on connector size, ambient temperature and related factors. Actual current rating is application dependent and should be evaluated for each use.

CKT SIZE	AWG	AMPS
20 CKT	16 AWG	7.0 AMPS

4.3 TEMPERATURE

Operating: - 40 Cº to + 125 Cº
Non-Operating: - 40 Cº to + 125 Cº

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	**Contact Resistance (Low Level)**	Mate Header with MX150 Receptacle: limiting the open circuit voltage of **20** mV and a maximum current of **100** mA.	**10 milliohms** MAXIMUM (initial)
2	**Contact Resistance @ Rated Current**	Mate Header with MX150 Receptacle: Apply a 5 ampere/mm2 current	**10 milliohms** MAXIMUM
3	**Insulation Resistance**	Apply a voltage of **500** VDC between adjacent terminals and between terminals to ground.	**20 Megohms** MINIMUM
4	**Temperature Rise (via Current Cycling)**	Mate Header with MX150 Receptacle: measure the temperature rise at the rated current after: 1. 96 hours (steady state) 2. 240 hours(**45** minutes ON and **15** minutes OFF per hour) 3. 96 hours (steady state)	Temperature rise over Ambient: **+55** Cº MAXIMUM

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	**Terminal Insertion and Extraction Forces**	Insert and withdraw terminal (male to female) at a rate of **50 ± 6** mm (**2 ± ¼** inch) per minute.	**6.5 Newtons** MAXIMUM
6	**Connector Mate and Unmate Forces**	Mate and unmate connector (male to female) at a rate of **50 ± 6** mm (**2 ± ¼** inch) per minute.	**130 Newtons** MAXIMUM (20 circuit)
7	**Terminal Retention Force (in Header Housing)**	Axial push out force on the terminal from the housing at a rate of **50 ± 6** mm (**2 ± ¼** inch) per minute.	**0.7 kgf** MINIMUM

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
8	**Thermal Aging**	Mate Header with MX150 Receptacle connector ; expose to :96 hours at 125 ± 2°C	**10 milliohms** MAXIMUM (change from initial) & Visual: No Damage
9	**Cold Resistance**	Mate Header with MX150 Receptacle connector ; expose to :96 hours at –40 ± 3°C	**10 milliohms** MAXIMUM (change from initial) & Visual: No Damage
10	**Solderability**	Per SMES-152	Solder coverage: **95% MINIMUM** (per SMES-152)
11	**Solder Resistance**	Dip Header terminal tails in solder; Duration: 5 ± 0.5 seconds Temperture : 245 ± 5°C	Visual: No damage to insulator material

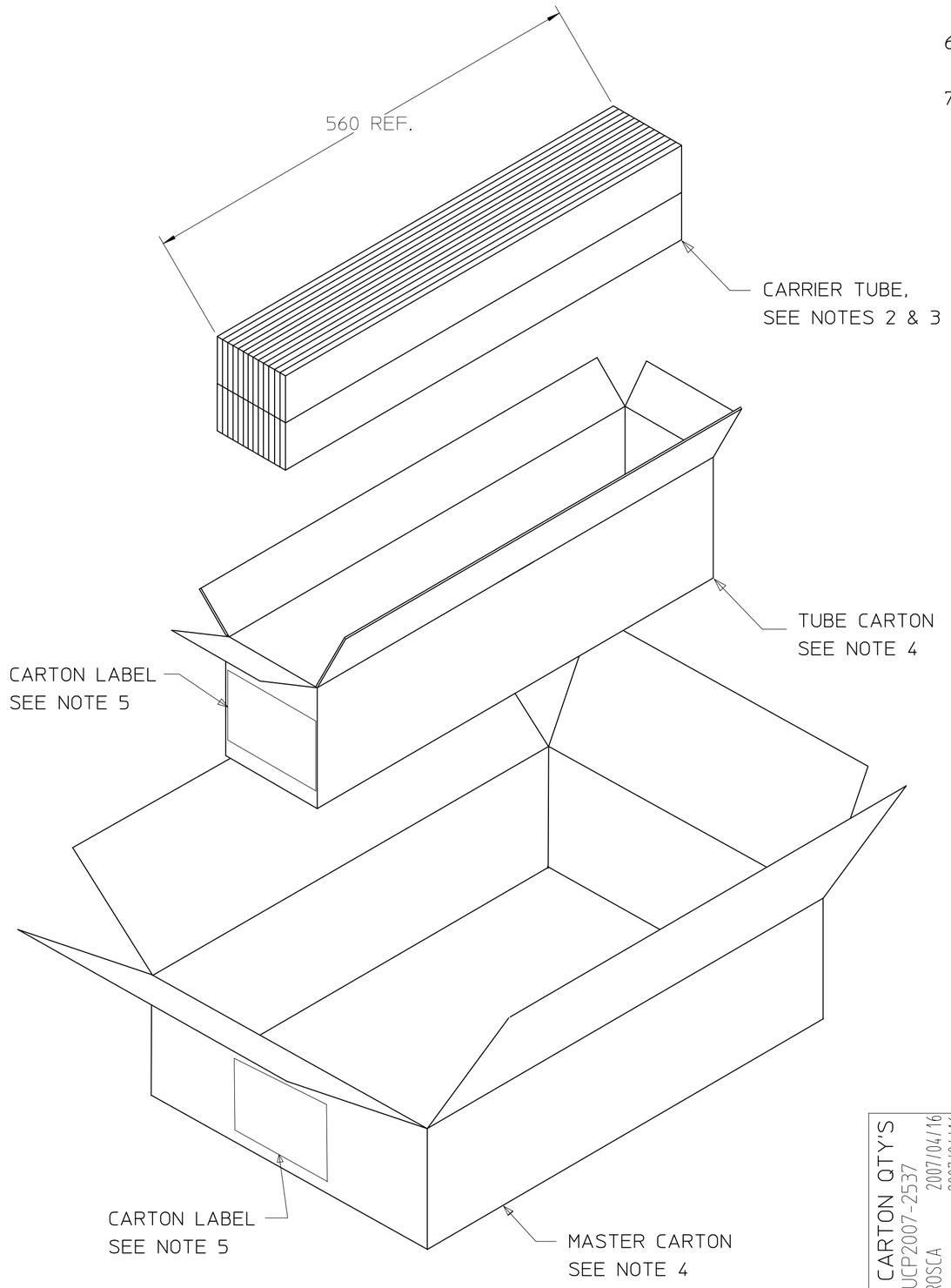
6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

7.0 GAGES AND FIXTURES

8.0 OTHER INFORMATION

CKT SIZE	PARTS PER TUBE	TUBES PER CARTON	PARTS PER CARTON	PARTS PER MASTER CARTON
1 X 2	77	26	2002	8008
1 X 3	50		1300	5200
1 X 4	37		962	3848
1 X 5	30		780	3120
1 X 6	25		650	2600



NOTES:
1. TAPE TO BE USED TO SET-UP AND CLOSE TUBE CARTONS AND MASTER CARTON.
2. TUBE PLUGS TO BE USED TO CLOSE EACH END OF TUBE. PLUGS ARE NOT TO MAKE CONTACT WITH THE HEADER TERMINALS.
3. TUBES TO BE ORIENTED IN CARTON 13 ACROSS BY 2 DEEP FOR A TOTAL OF 26 TUBES PER CARTON.
4. FOUR (4) TUBE CARTONS, 96707-0006 TO BE PACKAGED PER ONE (1) MASTER CARTON, 96708-0004.
5. LABELING OF TUBE CARTONS AND MASTER CARTON MUST COMPLY WITH MOLEX GENERAL STANDARD FOR LABELING, ES-40000-7012.
6. TUBE CARTON (96707-0006) MUST COMPLY WITH THE DIMENSIONAL SPECIFICATIONS & GRAPHIC DETAILS PER MOLEX ENGINEERING DRAWING E-96707-016.
7. MASTER CARTON (96708-0004) MUST COMPLY WITH THE DIMENSIONAL SPECIFICATIONS & GRAPHIC DETAILS PER MOLEX ENGINEERING DRAWING E-96707-001.

REV'D CARTON QTY'S
EC NO: UCP2007-2537 2007/04/16
DRWN: DROSCA 2007/04/16
CH'KD:
APPR: JCOMERCI 2007/04/18
DESCRIPTION
REV
B1

QUALITY SYMBOLS
▼=0
▽(C)=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY	TMCCLELL	DATE 01/04/06
CHECKED BY	TMCCLELL	DATE 01/04/06
APPROVED BY	BANAKIS	DATE 01/04/06

TITLE: PACKAGING SPECIFICATION MX150 SINGLE ROW VERTICAL HEADER ASSY

molex MOLEX INCORPORATED

MATERIAL NO. 75757-9910
DOCUMENT NO. PK-75757-007
SHEET NO. 1 OF 1
SIZE C