

Distributed by:



www.Jameco.com ♦ 1-800-831-4242

The content and copyrights of the attached
material are the property of its owner.

Jameco Part Number 224493

Molex Japan Co.,Ltd.

Product Specification

P/No.: 1625-NP,NP1/NR,NR1

The subject products should meet the following requirements when tested under the condition of involving all circuits with terminals crimped on the specified maximum size wire.

1. Electrical Performance

	Item	Test Condition		Requirement
1-1	Rated voltage and current		1~15 CKTS.	AC&DC 250V 5A
			24 CKTS.	AC&DC 250V 4A
1-2	Contact resistance	Mate connectors measure by Dry Circuit, 20mV max., 10mA.		10 mΩ max.
1-3	Dielectric strength	When applied AC 1500V 1 minute between adjacent terminals or ground		No breakdown
1-4	Insulation resistance	When applied DC 500V between adjacent terminals or ground		1000 MΩ min.

2. Mechanical Performance

	Item	Test Condition		Requirement
2-1	Insertion force	Mating speed : 25±3mm/minute		See para 7
2-2	Extraction force	Disengaging speed : 25±3mm/minute		See para 7
2-3	Durability	When mated up to 30 cycles by the rate of 10 cycles per minute	Contact resistance	20 mΩ max.
			Insertion extraction force	See para 7
2-4	Terminal retention force	Pull speed : 25±3mm/minute		7.0 kg min.
2-5	Terminal strength	When applied a load of 500gw, 1 minute		No damage

3. Environmental Performance

	Item	Test Condition		Requirement
3-1	Temperature rise	When carried the rated current		30 ℃ max.
3-2	Vibration	1.5mm,10-55-10Hz/min.,each 2 hrs. for X,Y&Z directions, applying 1mA-DC current	Contact resistance	20 mΩ max.
			Discontinuity	1 μ sec. max.
			Appearance	No damage
3-3	Shock	50G,each 3 times for X,Y,Z directions, applying 1mA-DC current	Discontinuity	1 μ sec. max.
			Appearance	No damage

REV. B

	Item	Test Condition		Requirement
3-4	Solderability	Soldering time : 3 ± 0.5 sec. Soldering pot : 230 ± 5 °C		Min. 3/4 of immersed area
3-5	Resistance to soldering heat	Soldering time : 5 ± 0.5 sec. Soldering pot : 260 ± 5 °C		No damage
3-6	Heat resistance	85 ± 2°C, 96 hours	Contact resistance	20 mΩ max.
			Appearance	No damage
3-7	Humidity	Temperature : 40±2°C Relative Humidity: 90~95% Duration : 96 hours Measurement must be taken within 30 minute after tested	Contact resistance	20 mΩ max.
			Dielectric strength	To pass para 1-3
			Insulation resistance	100 MΩ min.
			Appearance	No damage
3-8	Temperature cycling (5 cycles)	One cycle consists of (1) -55±3°C, 30 minute (2) Room temp. 10~15 minute (3) 105±2°C, 30 minute (4) Room temp. 10~15 minute	Contact resistance	20 mΩ max.
			Appearance	No damage
3-9	Salt Spray	Temperature: 35±2°C Solution : 5±1% Spray time : 48±4 hours Measurement must be taken after water rinse.	Contact resistance	20 mΩ max.
			Appearance	No significant corrosion
3-10	SO ₂ Gas	24 hours in sulfur dioxide gas (SO ₂) 50±5ppm at 40±2°C	Contact resistance	20 mΩ max.

4. Terminal To Be Used

	Customer P/No	Molex P/No	Wire Size	Insulation Dia.
1.		1560,1561	AWG #18 ~ #24	φ (1.5) ~ 3.1
2.		1854,1855	AWG #22 ~ #28	φ (1.1) ~ 1.5
3.		1778,1779	-----	-----
4.				

5. Ambient Temperature Range : -40°C ~ 105°C

6. Construction,Dimension and Material : Specified by the attached drawing.

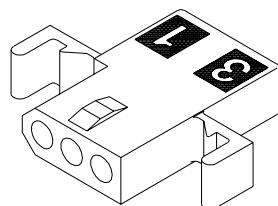
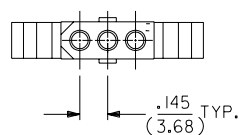
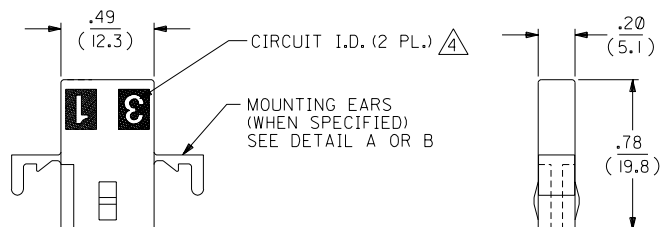
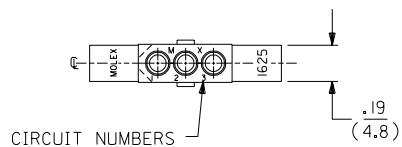
REV. B

7. Insertion and Extraction Force

No of Ckt.	Insertion Force (kgf, max.)			Extraction Force (kgf, min.)		
	1st	6th	30th	1st	6th	30th
1	5.0	4.5	4.5	0.8	0.5	0.5
2	7.0	6.0	6.0	1.5	1.0	1.0
3	10.0	9.0	8.0	1.8	1.2	1.2
4	13.0	12.0	10.0	2.0	1.4	1.4
5	15.5	14.0	11.0	2.3	1.5	1.5
6	18.0	16.0	12.0	2.5	1.6	1.6
9	26.0	23.0	17.0	3.5	2.5	2.5
12	34.0	30.0	23.0	4.5	3.5	3.5
15	40.0	35.0	30.0	5.5	4.5	4.5
24	60.0	55.0	50.0	6.5	5.5	5.5

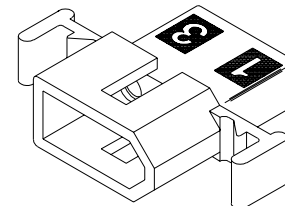
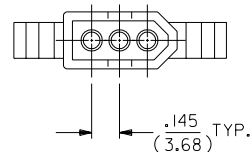
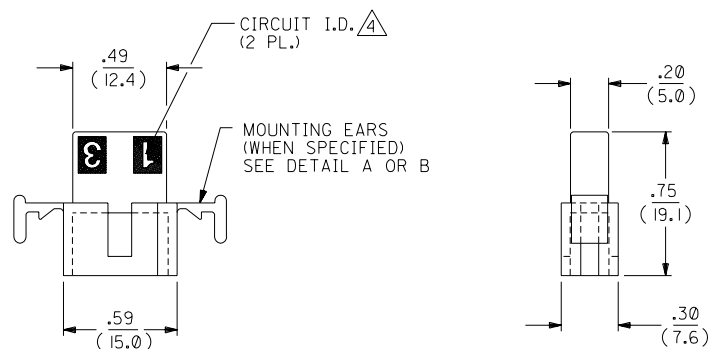
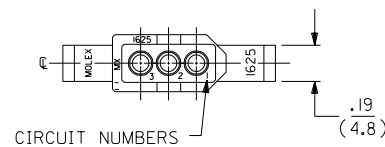
REV. B

RECEPTACLE



RECEPTACLE HOUSING
SHOWN WITH STANDARD EARS

PLUG



PLUG HOUSING
SHOWN WITH STANDARD EARS

N	OBSOLETE P/N UCP2003-1545 AELHAG, 03/1/15
M	OBSOLETE P/N UCR2002-0270 COMERCI 01/9/26
L	REMOVED -3R1-B &-3P-B UCR1999-0343 WANG 98-12-08
K	OBS. -3PBK, ADD -3P4BK ECR U3 07/16 CNC 4/21/93 RW
J2	X-REMOVE -3R4 ECR U3 06/20 CNC 4/21/93 RW
J1	X-REMOVE -3P4 ECR U2 1705 CNC 11/23/92 RW
J	ADDED CKT. NO'S. PER ECR U1166 CNC 7/22/91 RW

2	N			
1	N			
MEQ.	SH.	REV.	LTR.	REVISIONS

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .008	
3 PLACE	± .010	INCH	METRIC
2 PLACE	± .014	± .025	
1 PLACE	---	± .035	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRAWG. BY: KBW		CHK'D. BY: RW	
APP'D. BY: RAS		SCALE: 2: 1	
FILE NAME: SD16253X1		SHEET NO. 1 of 2	
DATE: 1/26/89		DIV. CP	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SIZE	

2	N			
1	N			
MEQ.	SH.	REV.	LTR.	REVISIONS

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .008	
3 PLACE	± .010	INCH	METRIC
2 PLACE	± .014	± .025	
1 PLACE	---	± .035	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRAWG. BY: KBW		CHK'D. BY: RW	
APP'D. BY: RAS		SCALE: 2: 1	
FILE NAME: SD16253X1		SHEET NO. 1 of 2	
DATE: 1/26/89		DIV. CP	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SIZE	

13 12 11 10 9 8 7 6 1625 4 3 2 1

PLUG	
PART NO.	ENG. NO.
03-06-2031	1625-3P
03-06-2032	1625-3P1
03-06-2034	1625-3P4BK
03-06-7032	1625-3P1BK
03-06-2033	1625-3P4

OBSOLETE

RECEPTACLE	
PART NO.	ENG. NO.
03-06-1033	1625-3R2
03-06-1031	1625-3R
03-06-1032	1625-3R1
03-06-6031	1625-3RBK
03-06-6032	1625-3R1BK
03-06-1034	1625-3R3
03-06-1038	1625-3R4

OBSOLETE

DETAIL A

.062/(1.57) STANDARD MOUNTING EAR (SCALE 4:1)

LEGEND:

1625-3****

CIRCUIT SIZE

P = PLUG
R = RECEPTACLE

BLANK = WITH STANDARD EARS
1 = WITHOUT EARS
2 = WITHOUT EARS, WITHOUT DETENTS
3 = WITH STD. EARS, WITHOUT DETENTS
4 = WITH PREBENT EARS

COLOR:

BLANK = NATURAL COLOR
AM = AMBER BK = BLACK BU = BLUE
BN = BROWN GY = GRAY GN = GREEN
OR = ORANGE RD = RED YW = YELLOW

DETAIL B

.062/(1.57)PREBENT MOUNTING EAR (SCALE 4:1)

RECOMMENDED PANEL OPENING

NOTES:

1. MOLEX PRODUCT SPEC 02-06 APPLIES.
2. ACCEPTS MOLEX .062 SERIES TERMINALS.
3. MATERIAL:
NYLON TYPE 6/6, 94V-2
4. CIRCUIT I.D. NUMBERS ON HOUSING APPEAR ON PARTS FROM TOOLS BUILT AFTER 7/22/91.

HOUSING	DIM. "A"	DIM. "B"	"C" PREBENT EAR	"C" STANDARD EAR
PLUG	.754/(19.15)	.318/(8.08)	.19/(4.8)	.18/(4.6)
RECEPT.	.650/(16.51)	.265/(6.73)	.21/(5.3)	.20/(5.1)

13 12 11 10 9 8 7 6 5 4 3 2 1