

A90166-001 APP PART NO. REV ECO DATE B 104157 01-10-18 HV

MATERIALS & SPECIFICATIONS

INSULATOR POLYETHERIMIDE

CONTACT MATERIAL

SIGNAL - COPPER ALLOY PER MIL-DTL-83513

POWER - COPPER ALLOY PER SAE-AS39029

CONTACT FINISH

SIGNAL - GOLD PLATE PER ASTM B488, TYPE II, CLASS 1.27, CODE C OVER NICKEL UNDERPLATE

POWER - GOLD PLATE PER ASTN B488, TYPE II, CLASS 1.27, CODE C OVER NICKEL UNDERPLATE

TERMINATION

SIGNAL - 26 AWG, (7-34) SILVER COATED COPPER, PTFE, COLOR CODED

POWER - 20 AWG, (7-28) SILVER COATED COPPER, PTFE, COLOR CODED

SHELLS

BRASS ALLOY 360

SHELL FINISH

ELECTROLESS NICKEL (200 MICROINCHES MINIMUM) PER SAE-AMS-2404

THIRD ANGLE⊕ ☐ -TOLERANCES—	THIS DRAWING CONTAINS CONFIDENTIAL AND OMNETICS CONNECTOR CORP. THIS DOCUMEN	PROPRIETARY INFORMATION WHICH IS THE PROPERTY OF IT MAY NOT, IN WHOLE OR IN PART, BE DUPLICATED, OR	OMNETICS	CAGE CODE 618	873
O UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES 2 PL DEC± .01	DFTM. ACW DATE 04-24-15		CONNECTOR CORPORATION		
0 3 PL DEC± .005	CHK'D.	TWIST LOCK	7260 COMMERCE CIRCLE EAST MINNEAPOLIS, MN 55432	SHEET 2 OF 4	REV
ĕ ANGLES ± 1°	APP'D.	CONNECTOR	WWW.OMNETICS.COM	SCALE: 6:1	В

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PRODUCT FAMILY TESTED TO AND PASSED THE FOLLOWING PERFORMANCE SPECIFICATIONS

CURRENT RATING: 3 AMPS MAX (SIGNAL CONTACTS)

10 AMPS MAX (POWER CONTACTS)

DIELECTRIC WITHSTANDING VOLTAGE: 600 VAC RMS (SIGNAL CONTACTS)

1000 VAC RMS (POWER CONTACTS)

INSULATION RESISTANCE: 5000 MEGAOHMS MIN @ 500 VDC

CONTACT RESISTANCE: 26 MILLIOHMS (65 mV) MAX @ 2.5 AMPS (SIGNAL CONTACTS)

7 MILLIOHMS (55 mV) MAX @ 7.5 AMPS (POWER CONTACTS)

CONTACT ENGAGEMENT & SEPARATION FORCES: 6 OZ MAX/CONTACT (ENGAGEMENT SIGNAL)

.5 OZ MIN/CONTACT (SEPARATION SIGNAL)

18 OZ MAX/CONTACT (ENGAGEMENT POWER)

.7 OZ MIN/CONTACT (SEPARATION POWER)

TEMPERATURE CYCLING: -55°C TO +125°C, 5 CYCLES

VIBRATION*: EIA-364-28, TEST CONDITION IV, 20 g's

MECHANICAL SHOCK*: EIA-364-27, TEST CONDITION D, 300 g's

DURABILITY: 500 CYCLES

*PENDING COMPLETION OF TESTING

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2	ANGLES ± 1°	APP'D.	DATE		CONN	IECTO	R

CAGE CODE 61873

DWG NO. ECTOR CORPORATION $A90166{-}001$ 7260 COMMERCE CIRCLE EAST MINNEAPOLIS, MN 55432 WWW.OMNÉTICS.COM

SHEET 3 OF 4 | REV В SCALE: 2:1

PART NO.	A90166-001	REV	ECO	DATE	APP
		В	104157	01-10-18	HV

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CONTACT #	COLOR	AWG	
1	BLACK		
2	BROWN		
3	RED		
4	ORANGE		
5	YELLOW		
6	GREEN	26	
7	BLUE	AWG	
8	VIOLET		
9	GRAY		
10	WHITE		
11	BLACK		
12	BROWN		
13	BLACK		
14	BROWN	20	
15	RED	AWG	
16	ORANGE		

3	THIRD ANGLE⊕ ← -TOLERANCES-	OMNETICS CONNECTOR	CORP. THIS DOCUME	NT MAY NOT, IN WHOLE O	ON WHICH IS THE PROPERTY OF OR IN PART, BE DUPLICATED, OF
ICP SLDW	UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES 2 PL DEC±.01 3 PL DEC±.005 4 PL DEC±.0005 ANGLES±1°	DFTM. ACW CHK'D. APP'D.	DATE 04-24-15 DATE DATE	TITLE: (4-12) TWI	PIN MALE IST LOCK NNECTOR

CONNECTOR CORPORATION A90166-001 7260 COMMERCE CIRCLE EAST MINNEAPOLIS, MN 55432 WWW.OMNETICS.COM

NETICS CAGE CODE 61873 DWG NO. SHEET 4 OF 4 REV

В SCALE: 1:1