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#### Jameco Part Number 1960281

## 3.96mm (.156") Pitch **Double-Sided Edge** KK®

## **Connector Terminals**

#### 4366

**PC Crimp and Solder Eyelet** 

#### **Features and Benefits**

- Solder loop version available
- Anti-fishhooking feature prevents terminals from snagging
- Wire barrier prevents stripped wire from entering the contact area
- Coined outside edges prevent excess scoring of the solder pad surfaces
- Patented bifurcated contact area
- Anti-overstress feature

#### **Reference Information**

Packaging: Reel or bag Use With: 4338 **Designed In: Inches** 

#### **Electrical**

Voltage: 250V Current: 5.0A Contact Resistance: 20 milliohms max. Dielectric Withstanding Voltage: 1500V Insulation Resistance: 50,000 Megohms min.

#### **Mechanical**

Contact Retention to Housing: 8 lb min. Wire Pull-Out Force: 20 lb for 18 AWG (less for smaller wire)

#### **Physical**

Contact: Brass Plating: See Table Operating Temperature: 0 to +75°C

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Orde	r No.	Crimen Wine Cine	Maximum Insulation Diameter	Engineering No.	Disting	Landfree
Reel Form	Bag Form	Crimp wire Size	Maximum insulation Diameter	Engineering No.	riating	Leaa-free
<u>08-03-0303</u>	<u>08-03-0304</u>	10.00	9.70 / 110)	4366	Tin	V
<u>08-05-0301</u>	<u>08-05-0302</u>	10-20	2.79 (.110)	4366	Gold	res

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### 3.96mm (.156") Pitch KK® **Crimp Terminal**

2478/2578



#### **Features and Benefits**

- Double cantilever design
- Single beam terminal is available for low insertion force 7821 Series (contact Molex)
- For low-level current and voltage, use Gold plating
- Phosphor Bronze is recommended for rated current
- Complete line of terminal crimping equipment available (see Application Tooling section of this catalog)

#### **Reference Information**

Product Specification: PS-08-50 Packaging: Reel or bag Tooling Information: See crimp tooling section UL File No.: E29179 CSA File No.: LR19980 Use With: 2139, 3069 and 41695 **Designed In: Inches** 

#### **Electrical**

Voltage: 250V AC max. Currents Mas

corrent. M	lux.				
AWG	18	20	22	24	26
Phosphor Bronze	7.00A	6.25A	5.50A	5.00A	4.50A
Brass	5.00A	4.75A	4.50A	4.25A	4.00A

www.molex.com/product/edgecard/

Contact Resistance: 6 milliohms max. Dielectric Withstanding Voltage: 1500V AC Insulation Resistance: 50K Megohms min.

#### **Mechanical**

Contact Insertion Force: 1.8kg (4 lb) max. Contact Retention to Housing: 3.6kg (8 lb) min. Wire Pull-Out Force: 20 lb max./18 AWG Normal Force: 0.75kg (1.65 lb) Durability: 25 cycles max.

#### **Physical**

**Contact: Brass or Phosphor Bronze** Platina: See Table Operating Temperature: Phosphor Bronze—0 to +75°C Brass—0 to +50°C

							er No.	Orde		
Lead-free	Material	Series	Insulation OD	Wire Size AWG	ting No. 2	Gold Pla	ting No. 1	Gold Pla	lating	Tin P
					Bag	Reel	Bag	Reel	Bag	Reel
	Phosphor Bronze	max. 2478	2.79 (.110)	18-20	<u>08-65-0115</u>	<u>08-65-0114</u>	<u>08-58-0122</u>	<u>08-58-0121</u>	<u>08-52-0072</u>	<u>08-52-0071</u>
Vec	Brass	max. 2478	2.79 (.110)	18-20	<u>08-55-0104</u>	<u>08-55-0103</u>	<u>08-56-0106</u>	<u>08-56-0105</u>	<u>08-50-0106</u>	<u>08-50-0105</u>
Tes	Phosphor Bronze	max. 2578	1.65 (.065)	22-26	<u>08-65-0117</u>	<u>08-65-0116</u>	<u>08-58-0126</u>	<u>08-58-0125</u>	<u>08-50-0134</u>	<u>08-50-0133</u>
	Brass	max. 2578	1.65 (.065)	22-26	08-55-0106	08-55-0105	08-56-0108	08-56-0107	08-50-0108	08-50-0107

Recommended wire range assumes stranded wire

Plating No. 1:  $20\mu$ " min. Gold in contact area with a flash overall Plating No. 2: 15µ" min. Gold in contact area only





# **PRODUCT SPECIFICATION**

#### DUALCON TM STRAIGHT/ON EDGE DUAL POSITION CONNECTOR

#### 1.0 SCOPE

This Product Specification covers the 3.96 mm (.156 inch) centerline (pitch) straight/on edge Dualcon – TM connectors terminated with 18 to 30 AWG wire when mated to the edge of a printed circuit board (PCB).

#### 2.0 PRODUCT DESCRIPTION

#### 2.1 PRODUCT NAME AND SERIES NUMBERS

Crimp terminals: 4366 (18 – 24 AWG; Insulation Dia. .060-.120), 4573 (24 – 30 AWG; Insulation Dia. .040 - .090) Solder lug terminals: 4574 Split – eyelet terminals: 4873 Housings: 4338

#### **2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS** Terminal Material: Alloy 260 brass, .010 thick Housing Material: Glass filled polyester, UL – 94 V – 0

### 2.3 SAFETY AGENCY APPROVALS UL File Number......E29179

CSA.....LR19980

#### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

None

#### 4.0 RATINGS

#### 4.1 VOLTAGE

Rated voltages, current maximum voltage: 250 VAC

#### 4.2 CURRENT

Up to 5 amps maximum per circuit is possible (\*)

(\*) Current capacity is dependent on wire size, connector size, contact material/plating, ambient temperature, printed circuit board characteristics and related factors.

#### 4.3 TEMPERATURE

Ambient Temperature Range: -40°C to 120°

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# **PRODUCT SPECIFICATION**

### 5.0 PERFORMANCE

#### 5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Terminal Resistance (Voltage drop measured at 1 amp)	Depends greatly on mating P.C. board and finish and condition of mating surface. One probe should be placed on the wire approximately 1" from the crimp barrel and the other probe on the P.C. board conductor as close as possible to the terminal interface (18 GA. Wire).	<b>5.0 mV</b> Typical value Includes the terminal, P.C.B. interface, plus the crimp.
2	Dielectric Withstanding Voltage	Unmate connectors: apply a voltage of <b>1500</b> VAC for <b>1</b> minute between adjacent terminals and between terminals to ground.	No breakdown; current leakage < <b>5</b> mA
3	Temperature Rise (via Current Cycling)	Mate connectors: measure the temperature rise at the rated current after: 1.) <b>96</b> hours (steady state) 2.) <b>240</b> hours ( <b>45</b> minutes ON and <b>15</b> minutes OFF per hour). 3.) <b>96</b> hours (steady state)	Temperature rise: <b>+30</b> °C MAXIMUM

<u>REVISION:</u>	ECR/ECN INFORMATION: EC No: UCP2006-2752 DATE: 2006-05-18	DUALCON	TM STRAIGHT/ON DSITION CONNEC	I EDGE TOR	<u>SHEET No.</u> <b>2</b> of <b>3</b>
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# **PRODUCT SPECIFICATION**

#### 5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4	Terminal Retention Force (in Housing)	Axial pullout force on the terminal in the.	<b>44.48</b> N ( <b>10</b> lbf) MINIMUM retention force
5	Wire Pullout Force (Axial)	Apply an axial pullout force on the wire.	AWGNIbf1888.96202066.72152253.38122435.5982622.2452813.343308.902
6	Terminal Insertion Force (into Housing)	Apply an axial insertion force on the terminal.	<b>13.34</b> N ( <b>3</b> lbf) Avg. insertion force
7	Normal Force	Apply a perpendicular force.	<b>3.43</b> N ( <b>350</b> g) approx.
8	PCB Engagement and Separation Forces	Engage and separate a connector at a rate. (Depends on the number of circuits and the actual size and type of P.C. board)	3.89 N (.875 lbf) Typical insertion force 1.11 N (.25 lbf) Typical withdrawal force (Typical force per dual circuits)

#### 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

Polarizing key (between contacts) # 6532 polyester, color: natural. Polarizing key (replaces contacts) #4338-\* polyester, color: natural.

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