



# PRODUCT SPECIFICATION

## PRODUCT SPECIFICATION FOR ESE EUROSTYLE TERMINAL BLOCKS 395XX PLUGS AND PCB HEADERS

### 1.0 SCOPE

This Product Specification covers the following centerline (pitch) ESE Terminal Block Connector Series with Tin or Gold plating

<u>3.50</u> mm ( <u>.138</u> inch)	<u>5.00</u> mm ( <u>.197</u> inch)
<u>3.81</u> mm ( <u>.150</u> inch)	<u>5.08</u> mm ( <u>.200</u> inch)

### 2.0 PRODUCT DESCRIPTION

#### 2.1 ESE PCB EUROSTYLE TERMINAL BLOCKS

#### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

A. ALL OF THESE ITEMS ARE DESCRIBED ON THE INDIVIDUAL SALES DRAWINGS

I. ALL DIMENSIONS HAVE BEEN VERIFIED

B. MATERIALS USED

I. HOUSINGS – BLACK OR GREEN

A. STANDARD PLUGS AND HEADERS: NYLON 6/6, UL94V-0

B. SURFACE MOUNT COMPATIBLE PLUGS & HEADERS

NYLON 4/6, UL94V-0

II. CONTACTS: COPPER ALLOY

C. CONTACT PLATING: I.TIN

II. GOLD

#### 2.3 SAFETY AGENCY APPROVALS

A. UL FILE #E48521 – RECOGNIZED

B. CSA FILE# 233512, CLASS #6228-01

### 3.0 RATINGS

#### 3.1 VOLTAGE RATING

300 Volts AC

#### 3.2 CURRENT RATING BY PITCH

3.50 mm (.138 inch) - 8.0 AMPS

3.81 mm (.150 inch) - 8.0 AMPS

5.00 mm (.197 inch), FIXED - 15 AMPS

5.08 mm (.200 inch), FIXED - 15 AMPS

5.00 mm (.197 inch), PLUG AND HEADER - 18 AMPS

5.08 mm (.200 inch), PLUG AND HEADER - 18 AMPS

#### 3.3 TEMPERATURE

Operating: STANDARD PLUGS AND HEADERS - 40°C to + 105°C

SURFACE MOUNT PLUGS AND HEADERS - 40°C to + 140°C

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: <b>IPG2017-0757</b> DATE: <b>2017 / 02 / 07</b>	TITLE: <b>PRODUCT SPECIFICATION FOR ESE EUROSTYLE TERMINAL BLOCKS</b>	SHEET No. <b>1 of 2</b>
DOCUMENT NUMBER: <b>PS-39500-001</b>	CREATED / REVISED BY: <b>C YORK/RSTONE</b>	CHECKED BY: <b>J MACNEIL</b>	APPROVED BY: <b>J MACNEIL</b>



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## 4.0 PERFORMANCE

### 4.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance	Per: IEC 60515-2	8 milliohms MAXIMUM [initial]
2	Insulation Resistance	Per: IEC60998-1	500 VDC min. 500 Megohms max
3	Dielectric Withstanding Voltage	Per: UL1059-12	2.5Kv, 60 Hz for 1 minute
4	Temperature Rise	Per: UL1059-1, 12AWG @ 18A	Temperature rise: <b>+30°C MAXIMUM</b>
5	Surge Voltage	Per: IEC60947-1	4.0Kv, 5 times for positive and passive poles for 5 seconds

### 4.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
6	Screw Torque	Per: UL1059-15,	<b>5.5 in lbs. 5 times</b> <b>12AWG &amp; 30AWG wire</b>
7	Secureness test	Per: UL486E- 12.	12AWG, mass: .09 kgf, height 279mm, bushing dia.: 9.5mm, time: 15 min.
8	Pullout test	Per: UL486E- 14	12AWG: 6.2kgf for 1 min. 30AWG: 0.3kgf for 1 min.
9	Aging test	Per: CSA C22.2 No. 159-1987	105°C ±1° for 7 days

## 5.0 PACKAGING

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

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