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

3.50 mm (.138 inch) 5.00 mm (.197 inch)
3.81 mm (.150 inch) 5.08 mm (.200 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

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: **+30**°C MAXIMUM
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,	**5.5 in lbs. 5 times 12AWG & 30AWG wire**
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.