

### 1.0 CONNECTOR PART NUMBERS

| D-500-0255 | BUS | STUB |
| :---: | :---: | :---: |
|  | JACKS | JACKS |
| $-533-1-\mathrm{MHI}$ | DK-621-0434-1S "A" <br> $(8912004-00-05)$ | DK-621-0440-4P "D" <br> $(8912004-00-04)$ |

### 2.0 INTERMATEABILITY

| CONNECTOR <br> BOX JACK | MATING PLUG | KEY <br> ("X") |
| :---: | :---: | :---: |
| DK-621-0434-1S <br> $(8912004-00-05)$ | DK-621-0433-1P <br> $(8912003-00-01)$ | A |
| DK-621-0440-4P <br> $(8912004-00-04)$ | DK-621-0439-4S <br> $(8912003-00-08)$ | D |

SCHEMATIC DIAGRAM

(C) 2007 Tyco Electronics Corporation. All Rights Reserved. SPECIFICATION CONTROL DRAWING


PRE-SHIPMENT TESTING: TO BE PERFORMED ON $100 \%$ OF COMPONENTS.
3.0 VISUAL CHECK
3.1 VISUAL CHECK SHALL BE PERFORMED PER RAYCHEM SPECIFICATION D-6021 AFTER ALL TESTS.
4.0 FUNCTIONAL TEST
4.1 COUPLER ASSEMBLY MAXIMUM VOLTAGE TEST SHALL BE PERFORMED USING THE TEST CONFIGURATION SHOWN BELOW. WHEN OUTPUT VOLTAGE IS MEASURED AT V2, THE VOLTAGE SHALL BE WITHIN THE LIMITS OF 5 TO 10 VOLTS AT THE PEAK-TO-PEAK VALUE OF LINE VOLTAGE. THIS TEST SHALL BE PERFORMED BY APPLYING A SQUARE WAVE FORM V1, WHICH ALLOWS PEAK-TO-PEAK VALUE OF 27V AND 250 KHz WITH THE SAME 100 NANOSECOND RISE AND FALL TIME AS ABOVE. (TO BE PERFORMED ON ALL STUB LINES.)
4.2 COUPLER ASSEMBLY MINIMUM VOLTAGE TEST SHALL BE PERFORMED USING THE TEST CONFIGURATION SHOWN BELOW. WHEN OUTPUT VOLTAGE IS MEASURED AT V2, THE VOLTAGE SHALL BE WITHIN THE LIMITS OF 5 TO 10 VOLTS AT THE PEAK-TO-PEAK VALUE OF LINE VOLTAGE. THIS TEST SHALL BE PERFORMED BY APPLYING A SQUARE WAVE FORM V1, WHICH ALLOWS PEAK-TO-PEAK VALUE OF 18 V AND 250 KHz WITH THE SAME 100 NANOSECOND RISE AND FALL TIME AS ABOVE. (TO BE PERFORMED ON ALL STUB LINES.)

## FIG-1 FUNCTION TEST CONFIGURATION

## TWO STUB COUPLER SCHEMATIC


5.0 RANDOM VIBRATION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH MIL-STD-202, METHOD 214, FOR 60 SECONDS IN EACH OF 3 MUTUALLY PERPENDICULAR AXES USING THE SPECTRUM SHOWN BELOW. THE COUPLER ASSEMBLY SHALL SHOW NO VISIBLE EVIDENCE OF FUNCTIONAL DAMAGE, NO ELECTRICAL SHORT CIRCUITS AND NO ELECTRICAL DISCONTINUITIES GREATER THAN 1 MICROSECOND DURING THE TEST. FUNCTIONAL TESTING SHALL BE PERFORMED AFTER THE TEST FOR EACH AXIS.

| FREQUENCY <br> $(\mathrm{Hz})$ | POWER SPECTRAL DENSITY <br> $\left(\mathrm{g}^{2} \mathrm{~Hz}\right)$ | RAMP RATE <br> $\left(\mathrm{m} / \mathrm{s}^{2}\right)^{2} / \mathrm{Hz}$ | $(\mathrm{dB} /$ OCTAVE $)$ |
| ---: | :---: | :---: | :---: |
| $20-40$ | 0.00236 | 0.2265 | +18 |
| $40-135$ | 0.1507 | 14.49 | -12 |
| $135-140$ | 0.1306 | 12.56 | -10 |
| $140-370$ |  |  | -9 |
| $370-446$ | 0.0703 | 6.764 |  |
| $446-630$ |  |  |  |
| $630-1205$ | 0.0100 | 0.9663 |  |

OVERALL VIBRATION LEVEL: 9.5 G rms
6.0 THERMAL CYCLING TESTING SHALL BE PERFORMED IN ACCORDANCE WITH MIL-STD-202, METHOD 107, USING THE TEST CONDITIONS SHOWN BELOW. THE COUPLER ASSEMBLY SHALL SHOW NO VISIBLE EVIDENCE OF FUNCTIONAL DAMAGE, NO ELECTRICAL SHORT CIRCUITS AND NO ELECTRICAL DISCONTINUITIES GREATER THAN 1 MICROSECOND DURING THE TEST.

(1) RAMP RATE: $0.5^{\circ}$ TO $1.0^{\circ} \mathrm{C} / \mathrm{MINUTE}$.
(2) MAINTAIN TEMPERATURE NOT LESS THAN 1 HOUR AFTER STABILIZATION.
(3) PERFORM FUNCTIONAL TEST AT THE END OF EACH TEMPERATURE DWELL.

[^0](C) 2007 Tyco Electronics Corporation. All Rights Reserved.

SPECIFICATION CONTROL DRAWING

|  |  | $\stackrel{\substack{\text { SIZE } \\ A}}{ }$ | $\begin{aligned} & \text { COOE IDENT. NO. } \\ & 06090 \end{aligned}$ | $\begin{aligned} & \text { OWGG. No. } \\ & \mathrm{D}-500-0255-533-1-\mathrm{MHI} \end{aligned}$ |  | E Rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| C070083D | Eloctron |  | Cils tus |  |  |  |


[^0]:    If this document is printed it becomes uncontrolled. Check for the latest revision

