

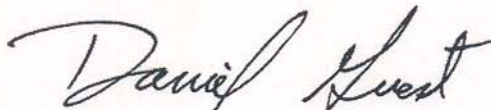
MARCH 3, 2004

TEST REPORT #204161

DIELECTRIC WITHSTAND VOLTAGE,

RZE10DHHN
EZC06DCWN
EZM22DCWH-S723
RZB40DCRN
EZA28DCSN

SULLINS ELECTRONICS CORP.



APPROVED BY: DAN GUEST
TEST ENGINEER
CONTECH RESEARCH, INC.



Contech Research

REVISION HISTORY			
DATE	REV. NO.	DESCRIPTION	ENG.
03/03/04	1.0	Initial Issue	DCG



CERTIFICATION

This is to certify that the evaluation described herein was designed and executed by personnel of Contech Research, Inc. It was performed in concurrence of Sullins Electronics Corp., of San Marcos, California, who was the test sponsor.

All equipment and measuring instruments used during testing were calibrated and traceable to NIST according to ISO 10012-1 and ANSI/NCSL Z540-1, as applicable.

All data, raw and summarized, analysis and conclusions presented herein are the property of the test sponsor. No copy of this report, except in full, shall be forwarded to any agency, customer, etc., without the written approval of the test sponsor and Contech Research.



Dan Guest
Test Engineer
Contech Research, Inc.

DCG:



SCOPE

To perform Dielectric Withstand Voltage (DWV) testing on five types of connectors as submitted by the test sponsor, Sullins Electronics Corporation.

APPLICABLE DOCUMENTS

1. Unless otherwise specified, The following documents of issue in effect at the time of testing performed form a part of this report to the extent as specified herein. The requirements of sub-tier specifications and/or standards apply only when specifically referenced in this report.
2. Standards:
 - a) EIA 364

TEST SAMPLES AND PREPARATION

1. Test samples of each style were marked with a sample number (1,2, or 3).
2. For purposes of testing, wires were "tack soldered" to the ends of the connector leads.
3. Other than the preparation above, the test samples were tested in their 'as received' condition.

TEST SELECTION

1. One sample of each connector type was tested to dielectric breakdown.
2. The remaining two samples of each type were subjected to 75% of the lowest breakdown voltage from step 1.



DATA SUMMARY

Connector Model	Working Voltage (VAC)
EZA28DCSN	750
EZM22DCWH-S723	950
RZB40DCRN	300
RZE100HHN	375
EZC06DCWN	750



EQUIPMENT LIST

ID#	Next Cal	Last Cal	Equipment Name	Manufacturer	Model #	Serial #	Accuracy	Freq. Cal
321	2/4/05	2/4/04	AC-DC Hipot	Hipotronics Co.	H300B	DS16-201	See Cal Cert.	12 mo.
1145	11/6/04	11/5/04	Digital Timer	VWR	62379-036	99319122	±0.01%	12 mo.



TEST RESULTS



PROJECT NO.: 204161

SPECIFICATION: EIA 364

PART DESCRIPTION: PCB Mnt. Connectors

SAMPLE SIZE: 5 Styles

TECHNICIAN: MOB

START DATE: 03/01/2004

COMPLETE DATE: 03/02/2004

ROOM AMBIENT: 24°C

RELATIVE HUMIDITY: 22%

EQUIPMENT ID#: 321, 1145

DIELECTRIC WITHSTAND VOLTAGE

PURPOSE:

To establish the AC voltage at which dielectric breakdown occurs between pairs of contacts in the connector.

PROCEDURE:

1. One sample of each type was selected to test dielectric breakdown voltage. Multiple pairs of contacts were tested to breakdown. These breakdown voltages were recorded.
2. Ten adjacent contacts in the other two samples were wired in alternating polarity, and subjected to 60 seconds at 75% of the lowest AC breakdown voltage from step 1. These samples must not break down at this voltage.
3. The working AC voltage rating is 1/3 the DWV voltage of step 2, assuming no breakdowns have occurred.

REQUIREMENTS:

1. Record all breakdown voltages in the first connector in each group.
2. Record a pass or fail for the other two connectors in the group.
3. Calculate the working voltage as 1/3 the passed Dielectric Withstand Voltage of step 2.

RESULTS: See next page.



RESULTS:

1. The AC breakdown voltages of each sample type are shown in the tables below.

Model: EZA28DCSN

Position	Breakdown VAC		Position	Breakdown VAC
2-4	3800		22-24	3400
6-8	3000		26-28	3800
10-12	3700		30-32	3600
14-16	3700		34-36	3600
18-20	3700		38-40	3800

Model: EZM22DCWH-S723

Position	Breakdown VAC		Position	Breakdown VAC
A-B	4100		M-N	4400
C-D	4200		P-R	3900
E-F	4400		S-T	3800
H-J	4600		U-V	4200
K-L	4200		W-X	4100

Model: RZB40DCRN

Position	Breakdown VAC		Position	Breakdown VAC
1-2	1200		11-12	2200
3-4	2000		13-14	1400
5-6	1700		15-16	2300
7-8	1600		17-18	2300
9-10	2200		19-20	2500

Model: RZE100HHN

Position	Breakdown VAC		Position	Breakdown VAC
1-2	2300		11-12	1800
3-4	1500		13-14	2200
5-6	2000		15-16	1500
7-8	2200		17-18	1600
9-10	2100		19-20	2000



RESULTS - CONTINUED

Model: EZC06DCWN

Position	Breakdown VAC		Position	Breakdown VAC
2-4	3000		9-11	3700
6-8	3200			
10-12	3500			
1-3	3500			
5-7	3500			

2. The Dielectric Withstand Voltage for each connector was set to 75% of the lowest breakdown voltage of these connector. The voltages are:

Connector Model	DWV Test Voltage, VAC
EZA28DCSN	2250
EZM22DCWH-S723	2850
RZB40DCRN	900
RZE100HHN	1125
EZC06DCWN	2250

3. The remaining two connectors of each group passed the DWV test at the voltages shown above. No dielectric breakdowns occurred.
4. The working voltage rating of each connector type is 1/3 of the DWV voltage and is shown below:

Connector Model	Working Voltage (VAC)
EZA28DCSN	750
EZM22DCWH-S723	950
RZB40DCRN	300
RZE100HHN	375
EZC06DCWN	750

