



TEST REPORT

PRODUCT ENGINEERING LABORATORY	RL. 130119	Revision: 1
Material / Parts description: TERMINAL .250 SERIES REC. WITH LATCH	PN: 170031-1	Revision: AE
Requester: MAURICIO GISOLDI	Dept: EPA	
Customer: HONDA	Supplier: TE BRAZIL	

Confidentiality:	Distribution:
() 1- CONFIDENTIAL	(X) REQUESTER
() 2- TYCO RESTRICTED	(X) DM.TEC
(X) 3- ADDRESSED CUSTOMER	()

Purpose: 1 - VALIDATION TEST	History: VALIDATION TEST FOR CUSTOMER SUMIDENSO (FINAL CUSTOMER HONDA).
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Performed tests: VOLTAGE DROP (ITEM 6.14)	Specification (s): CONNECTOR SPECIFICATION FOR WIRE HARNESS 3211Z-GHA-6000 (HONDA SPEC.)
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Conclusion:

SEE RESULTS FOR INDIVIDUAL TESTS.

Oct 17, 2012
Date

***Assinatura em arquivo**
Performed by
DIOGO BIASETTO ROJAS
LABORATORY ENGINEER

***Assinatura em arquivo**
Responsible
ROBERTO DE OLIVEIRA
PRINCIPAL AND LABORATORY MANAGER

I- SAMPLES IDENTIFICATION:

SAMPLING:

500 TERMINAL .250 SERIES REC. WITH LATCH, PN: 170031-1.

80 .250 FAST TEST TAB, PN: 62627-2.

Combination 1:

AVSS 2,0mm² wire cable.



Combination 2:

AVSSB 0,5+0,5mm² wire cable.



Combination 3:

AVSSB 0,5+0,75mm² wire cable.



Combination 4:

AVSSB 0,5+1,25mm² wire cable.



Combination 5:

AVSSB 0,5mm² + AVSS 0,5mm² wire cable.



Combination 6:

AVSSB 0,75mm² wire cable.



Combination 7:

AVSSB 0,75+0,75mm² wire cable.



Combination 8:

AVSSB 1,25mm² wire cable.



Combination 9:

AVSSB 0,5mm² wire cable.



Combination 10:

AVSSB 0,75mm² + AVSS 0,85mm² wire cable.



.250 Fast test TAB:



Results:

ENVIRONMENTAL CONDITIONS:

Temperature: 23 +/- 5°C.

Humidity: 45 - 70%.

SPECIFICATION:

CONNECTOR SPECIFICATION FOR WIRE HARNESS 3211Z-GHA-6000.

VOLTAGE DROP (ITEM 6.14):

2.3 Voltage drop:

Equipments:

Power supply PAK 20-36A.

Digital Multimeter Agilent model: 34401A, nr. 93-339033-024.

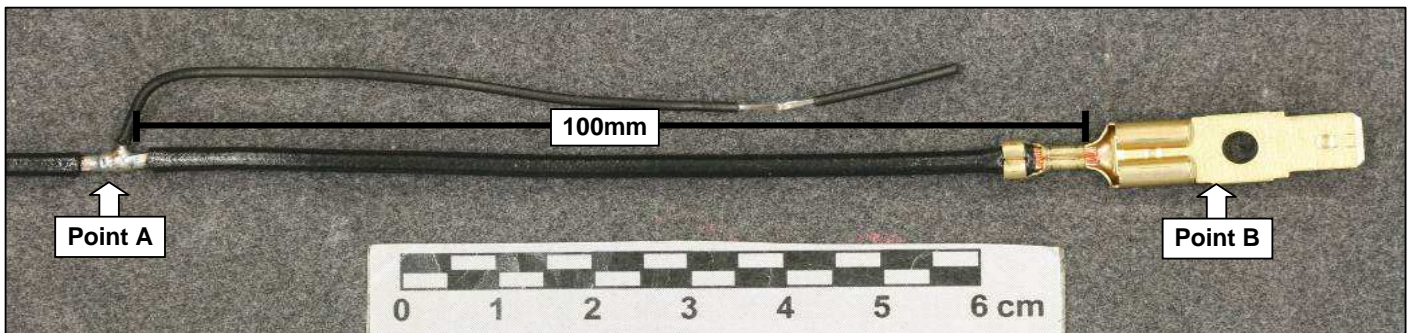
Digital Multimeter HP model: 34401A, nr. 93-339033-031.

Procedure:

Measure the voltage drop from point A to point B less 100mm of cable (please see photo below).

Current applied 1Adc.

Opened circuit: Voltage 12Vdc.



Requirements:

Initial voltage drop $\leq 1\text{mV/A}$.

Data:

Combination 1:

AVSS 2,0mm² wire cable.

Samples	Voltage drop [mV/A]
1	0,86
2	0,79
3	0,91
4	1,08
5	0,95
6	0,84
7	1,20
8	0,91
9	1,27
10	0,81
11	0,79
12	0,91
13	0,92
14	0,83
15	0,96
16	0,86
17	0,88
18	0,81
19	1,12
20	0,77
21	0,88
22	0,75
23	0,95
24	0,94
25	1,10
26	0,93
27	0,85

Samples	Voltage drop [mV/A]
28	0,96
29	0,81
30	0,91
31	0,91
32	0,88
33	1,00
34	0,74
35	1,21
36	1,11
37	1,04
38	0,88
39	1,06
40	0,96
41	1,00
42	0,94
43	0,85
44	0,92
45	0,86
46	0,77
47	0,93
48	0,88
49	1,27
50	1,09
Min.	0,74
Average	0,94
Max.	1,27

Results:

Divergent from spec.

Combination 2:

AVSSB 0,5+0,5mm² wire cable.

Samples	Voltage drop [mV/A]
51	1,42
52	0,91
53	2,39
54	1,25
55	1,58
56	1,03
57	1,22
58	2,00
59	1,77
60	1,13
61	1,98
62	1,43
63	2,76
64	1,27
65	1,10
66	2,26
67	1,00
68	0,86
69	1,01
70	1,71
71	2,54
72	1,75
73	2,66
74	2,17
75	1,20
76	1,24
77	1,06
78	1,42
79	2,47
80	1,22
81	1,33
82	1,31
83	2,31
84	1,81

Samples	Voltage drop [mV/A]
85	1,42
86	2,14
87	1,91
88	1,04
89	1,43
90	3,90
91	0,97
92	0,89
93	1,27
94	1,43
95	1,08
96	1,05
97	0,92
98	0,80
99	1,86
100	1,44
101	1,14
102	2,16
103	1,72
104	1,07
105	0,97
106	1,36
107	3,00
108	1,69
109	3,06
110	1,34
111	1,66
112	2,49
113	1,08
114	3,26
115	1,54
116	3,01
117	1,13
118	1,63

Samples	Voltage drop [mV/A]
119	0,88
120	0,96
121	0,74
122	1,05
123	2,12
124	1,19
125	1,24
126	2,14
127	3,01
128	1,75
129	1,44
130	1,59
131	1,29
132	1,64
133	1,15
134	0,99
135	0,88
136	0,83
137	1,00
138	1,61
139	1,14
140	0,98
141	0,93
142	1,37
143	1,05
144	1,18
145	2,22
146	1,85
147	1,60
148	1,44
149	1,05
150	2,31
Min.	0,74
Average	1,56
Max.	3,90

Results:

Divergent from spec.

Combination 3:

AVSSB 0,5+0,75mm² wire cable.

Note: Samples with odd numeration are 0,5mm² wire cable and samples with even numeration are 0,75mm² wire cable.

Samples	Voltage drop [mV/A]
151	1,74
152	1,48
153	2,10
154	1,54
155	1,12
156	1,06
157	1,12
158	1,03
159	2,00
160	1,58
161	1,78
162	1,33
163	1,65
164	1,43
165	1,32
166	1,30
167	1,69
168	1,21
169	1,29
170	1,07
171	1,91
172	1,30
173	1,64
174	1,03
175	1,35
176	1,19
177	1,67
178	1,27
179	2,54
180	1,85
181	1,73
182	1,29
183	1,39
184	1,36

Samples	Voltage drop [mV/A]
185	1,37
186	1,21
187	1,56
188	1,27
189	2,67
190	1,60
191	1,20
192	1,03
193	1,19
194	1,14
195	1,35
196	1,24
197	1,16
198	1,10
199	1,78
200	1,42
201	1,29
202	0,99
203	2,87
204	1,76
205	1,34
206	1,42
207	1,34
208	1,18
209	1,46
210	1,27
211	1,39
212	1,68
213	1,71
214	1,67
215	1,76
216	1,52
217	1,35
218	1,10

Samples	Voltage drop [mV/A]
219	1,70
220	1,73
221	1,64
222	1,64
223	1,59
224	1,38
225	1,57
226	1,59
227	1,33
228	1,40
229	1,48
230	1,38
231	2,03
232	1,29
233	2,04
234	1,19
235	1,55
236	1,13
237	1,70
238	1,22
239	1,84
240	1,44
241	1,19
242	1,15
243	1,24
244	1,42
245	0,84
246	1,23
247	1,24
248	1,26
249	1,43
250	1,01
Min.	0,84
Average	1,46
Max.	2,87

Results:

Divergent from spec.

Combination 4:

AVSSB 0,5+1,25mm² wire cable.

Note: Samples with odd numeration are 0.5mm² wire cable and samples with even numeration are 1.25mm² wire cable.

Samples	Voltage drop [mV/A]
251	1,76
252	1,24
253	1,88
254	1,36
255	1,92
256	1,69
257	4,25
258	1,95
259	3,16
260	1,81
261	1,76
262	1,20
263	4,32
264	1,57
265	1,55
266	1,37
267	2,46
268	1,52
269	3,12
270	1,62
271	4,17
272	1,63
273	4,55
274	1,55
275	3,41
276	1,74
277	3,18
278	2,73
279	6,12
280	1,88
281	3,33
282	1,14
283	4,75
284	2,75

Samples	Voltage drop [mV/A]
285	2,20
286	1,47
287	2,57
288	1,53
289	4,03
290	1,96
291	6,07
292	2,13
293	1,79
294	1,64
295	4,53
296	1,56
297	1,39
298	1,24
299	2,92
300	1,80
301	4,05
302	1,55
303	2,77
304	1,71
305	3,22
306	1,26
307	3,80
308	2,19
309	2,87
310	1,46
311	2,73
312	1,35
313	1,97
314	1,72
315	1,79
316	1,54
317	3,21
318	1,62

Samples	Voltage drop [mV/A]
319	2,99
320	1,78
321	2,17
322	1,39
323	1,97
324	1,86
325	2,28
326	1,70
327	1,84
328	1,44
329	4,96
330	1,48
331	5,29
332	1,61
333	2,91
334	1,54
335	2,09
336	1,66
337	1,84
338	1,53
339	2,43
340	1,20
341	1,60
342	1,36
343	3,46
344	2,22
345	2,07
346	1,51
347	5,29
348	2,40
349	2,25
350	1,61
Min.	1,14
Average	2,36
Max.	6,12

Results:

Divergent from spec.

Combination 5:

AVSSB 0,5mm² + AVSS 0,5mm² wire cable.

Note: Samples with odd numeration are AVSSB 0,5mm² wire cable and samples with even numeration are AVSS 0,5mm² wire cable.

Samples	Voltage drop [mV/A]
351	1,42
352	0,91
353	2,39
354	1,25
355	1,58
356	1,03
357	1,22
358	2,00
359	1,77
360	1,13
361	1,98
362	1,43
363	2,76
364	1,27
365	1,10
366	2,26
367	1,00
368	0,86
369	1,01
370	1,71
371	2,54
372	1,75
373	2,66
374	2,17
375	1,20
376	1,24
377	1,06
378	1,42
379	2,47
380	1,22
381	1,33
382	1,31
383	2,31
384	1,81

Samples	Voltage drop [mV/A]
385	1,42
386	2,14
387	1,91
388	1,04
389	1,43
390	3,90
391	0,97
392	0,89
393	1,27
394	1,43
395	1,08
396	1,05
397	0,92
398	0,80
399	1,86
400	1,44
401	1,14
402	2,16
403	1,72
404	1,07
405	0,97
406	1,36
407	3,00
408	1,69
409	3,06
410	1,34
411	1,66
412	2,49
413	1,08
414	3,26
415	1,54
416	3,01
417	1,13
418	1,63

Samples	Voltage drop [mV/A]
419	0,88
420	0,96
421	0,74
422	1,05
423	2,12
424	1,19
425	1,24
426	2,14
427	3,01
428	1,75
429	1,44
430	1,59
431	1,29
432	1,64
433	1,15
434	0,99
435	0,88
436	0,83
437	1,00
438	1,61
439	1,14
440	0,98
441	0,93
442	1,37
443	1,05
444	1,18
445	2,22
446	1,85
447	1,60
448	1,44
449	1,05
450	2,31
Min.	0,74
Average	1,56
Max.	3,90

Results:

Divergent from spec.

Combination 6:

AVSSB 0,75mm² wire cable.

Samples	Voltage drop [mV/A]
451	0,59
452	0,79
453	0,62
454	0,76
455	0,71
456	1,03
457	1,15
458	0,76
459	0,86
460	0,76
461	0,74
462	0,93
463	1,29
464	0,84
465	0,77
466	0,82
467	0,80
468	0,87
469	0,87
470	0,78
471	0,83
472	0,76
473	0,87
474	0,75
475	0,81
476	0,75
477	0,97

Samples	Voltage drop [mV/A]
478	0,84
479	1,00
480	1,14
481	0,75
482	0,83
483	0,79
484	0,68
485	0,91
486	0,77
487	0,74
488	0,58
489	0,72
490	0,96
491	0,71
492	0,76
493	0,73
494	0,96
495	0,88
496	1,23
497	0,93
498	0,98
499	0,69
500	0,78
Min.	0,58
Average	0,84
Max.	1,29

Results:

Divergent from spec.

Combination 7:

AVSSB 0,75+0,75mm² wire cable.

Samples	Voltage drop [mV/A]
501	2,23
502	2,36
503	2,28
504	2,49
505	2,22
506	2,39
507	3,17
508	3,53
509	3,17
510	4,01
511	1,25
512	1,26
513	2,24
514	2,35
515	2,28
516	2,11
517	1,44
518	1,62
519	2,07
520	2,56
521	1,37
522	1,89
523	1,22
524	1,29
525	2,17
526	2,70
527	2,69
528	2,75
529	2,68
530	2,23
531	1,99
532	2,30
533	1,59
534	1,82

Samples	Voltage drop [mV/A]
535	2,17
536	2,56
537	2,47
538	2,26
539	3,01
540	1,83
541	4,08
542	2,13
543	1,92
544	2,00
545	2,29
546	2,24
547	2,82
548	2,67
549	2,67
550	2,53
551	2,83
552	2,59
553	2,98
554	1,95
555	2,08
556	2,22
557	2,36
558	2,16
559	2,24
560	2,20
561	3,12
562	3,43
563	1,93
564	3,02
565	2,39
566	2,13
567	2,17
568	2,24

Samples	Voltage drop [mV/A]
569	2,07
570	2,46
571	1,47
572	2,80
573	2,89
574	3,85
575	3,27
576	3,59
577	1,21
578	1,81
579	1,69
580	1,99
581	2,35
582	2,63
583	1,20
584	1,48
585	2,25
586	2,20
587	1,86
588	2,11
589	2,17
590	3,00
591	1,99
592	2,24
593	2,05
594	2,77
595	2,31
596	2,08
597	2,07
598	1,83
599	3,03
600	3,25
Min.	1,20
Average	2,33
Max.	4,08

Results:

Divergent from spec.

Combination 8:

AVSSB 1,25mm² wire cable.

Samples	Voltage drop [mV/A]
601	1,63
602	1,52
603	1,70
604	2,18
605	1,60
606	1,76
607	1,20
608	1,30
609	2,08
610	1,51
611	2,70
612	2,14
613	1,60
614	1,55
615	1,28
616	1,91
617	1,45
618	2,35
619	1,98
620	1,23
621	1,35
622	1,76
623	1,50
624	1,46
625	1,71
626	1,73
627	1,48

Samples	Voltage drop [mV/A]
628	2,03
629	1,70
630	2,08
631	1,83
632	1,29
633	1,20
634	2,12
635	1,40
636	1,19
637	1,46
638	1,57
639	3,64
640	1,88
641	2,04
642	1,87
643	1,31
644	1,66
645	1,31
646	1,24
647	1,45
648	1,58
649	1,18
650	1,19
Min.	1,18
Average	1,68
Max.	3,64

Results:

Divergent from spec.

Combination 9:

AVSSB 0,5mm² wire cable.

Samples	Voltage drop [mV/A]
651	0,77
652	0,73
653	1,01
654	0,76
655	0,90
656	0,78
657	0,76
658	0,86
659	0,67
660	1,07
661	0,89
662	3,34
663	0,83
664	0,89
665	0,86
666	0,89
667	0,77
668	0,84
669	0,70
670	0,75
671	0,77
672	0,87
673	0,68
674	0,69
675	0,72
676	0,99
677	0,70

Samples	Voltage drop [mV/A]
678	0,80
679	0,88
680	0,78
681	1,02
682	0,81
683	0,78
684	0,80
685	0,79
686	0,77
687	0,73
688	1,02
689	0,71
690	0,92
691	0,68
692	0,78
693	0,79
694	1,28
695	1,47
696	0,88
697	0,97
698	0,87
699	1,20
700	1,02
Min.	0,67
Average	0,91
Max.	3,34

Results:

Divergent from spec.

Combination 10:

AVSSB 0,75mm² + AVSS 0,85mm² wire cable.

Note: Samples with odd numeration are AVSSB 0.75mm² wire cable and samples with even numeration are AVSS 0.85mm² wire cable.

Samples	Voltage drop [mV/A]
701	1,46
702	1,39
703	2,14
704	2,26
705	1,26
706	1,59
707	1,47
708	1,57
709	1,20
710	2,25
711	2,02
712	2,34
713	2,29
714	2,19
715	1,33
716	1,57
717	2,16
718	2,13
719	1,99
720	1,69
721	1,43
722	2,29
723	1,80
724	2,44
725	1,21
726	1,90
727	1,59
728	1,53
729	1,73
730	1,30
731	1,23
732	1,84
733	1,20
734	1,06

Samples	Voltage drop [mV/A]
735	1,75
736	1,55
737	1,34
738	1,39
739	1,69
740	1,66
741	1,79
742	1,87
743	1,36
744	1,20
745	1,77
746	2,69
747	1,76
748	2,83
749	1,60
750	1,53
751	1,52
752	1,48
753	1,17
754	2,39
755	1,72
756	1,46
757	1,79
758	2,27
759	1,41
760	1,64
761	1,28
762	2,53
763	2,41
764	2,55
765	1,54
766	1,74
767	1,39
768	1,76

Samples	Voltage drop [mV/A]
769	1,14
770	1,32
771	1,36
772	1,45
773	2,11
774	1,25
775	1,16
776	1,93
777	1,46
778	1,69
779	1,48
780	2,70
781	1,09
782	1,15
783	1,62
784	1,39
785	1,52
786	1,38
787	1,66
788	1,23
789	1,67
790	1,22
791	2,11
792	1,91
793	1,46
794	1,59
795	1,39
796	1,72
797	1,40
798	1,32
799	0,99
800	0,90
Min.	0,90
Average	1,66
Max.	2,83

Results:

Divergent from spec.

Conclusion:

All combinations results are under the specification.