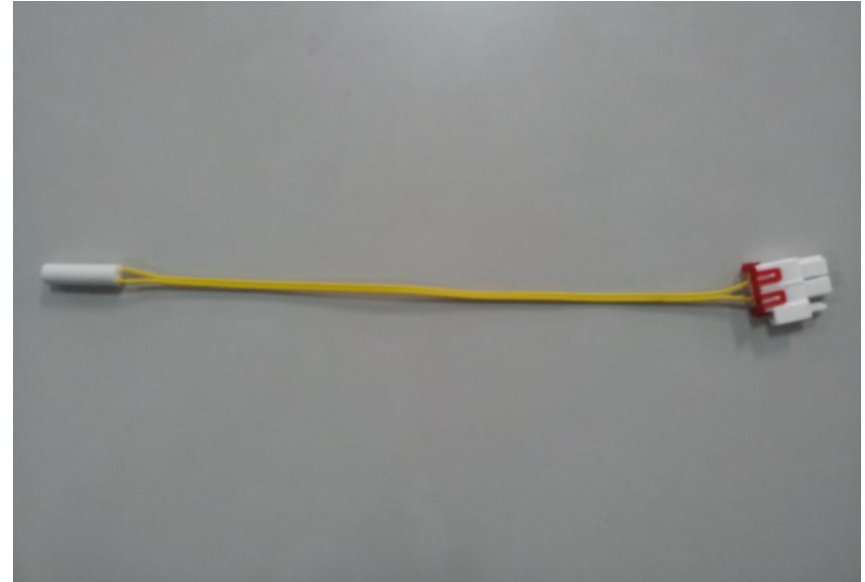


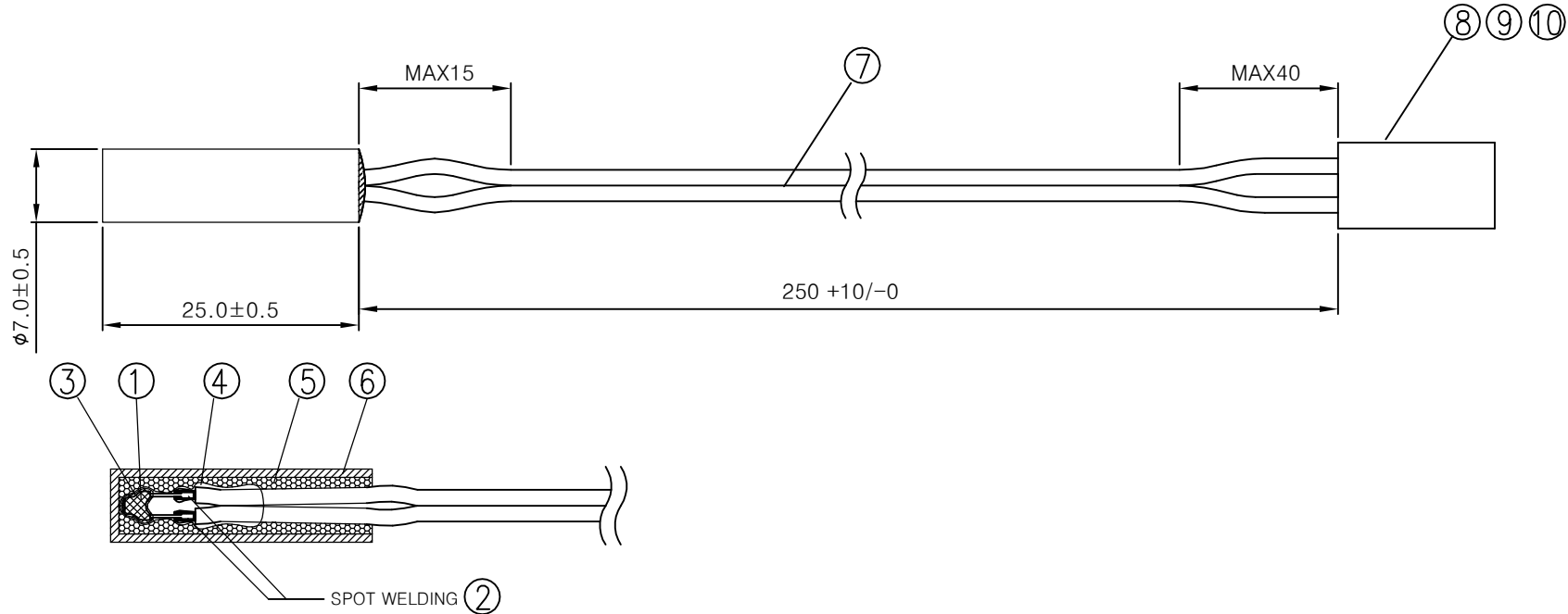
# NTC Thermistor Sensors for Refrigeration

<b>Part Number</b>	7601 - 010001 (DA32-00006D)	
<b>Application</b>	Temperature Sensing etc.	
<b>Function</b>	<ul style="list-style-type: none"> <li>• Temperature automatic control for defrost and for protecting the frozen rupture in the cold storage or freezing systems</li> <li>• Easy to install at the small or narrow space as slim shape</li> <li>• Small size with high contacting capacitance</li> <li>• Available waterproof and dustproof types with welding vinyl tube on the part</li> </ul>	
<b>Specification</b>	<b>Max Rated Watt</b>	100mW
	<b>Resistance Value</b>	5kΩ±1% @ 25°C
	<b>B(25/85) Value</b>	3324K±1%
	<b>Temperature Range</b>	-40°C to 70°C
	<b>Dielectric Withstand</b>	AC 1.8kV for 1 second
	<b>Insulation Resistance</b>	100MΩ Min.

(Picture)



- Any requirements for Connectors and Lead Wire are acceptable.



**NOTE**

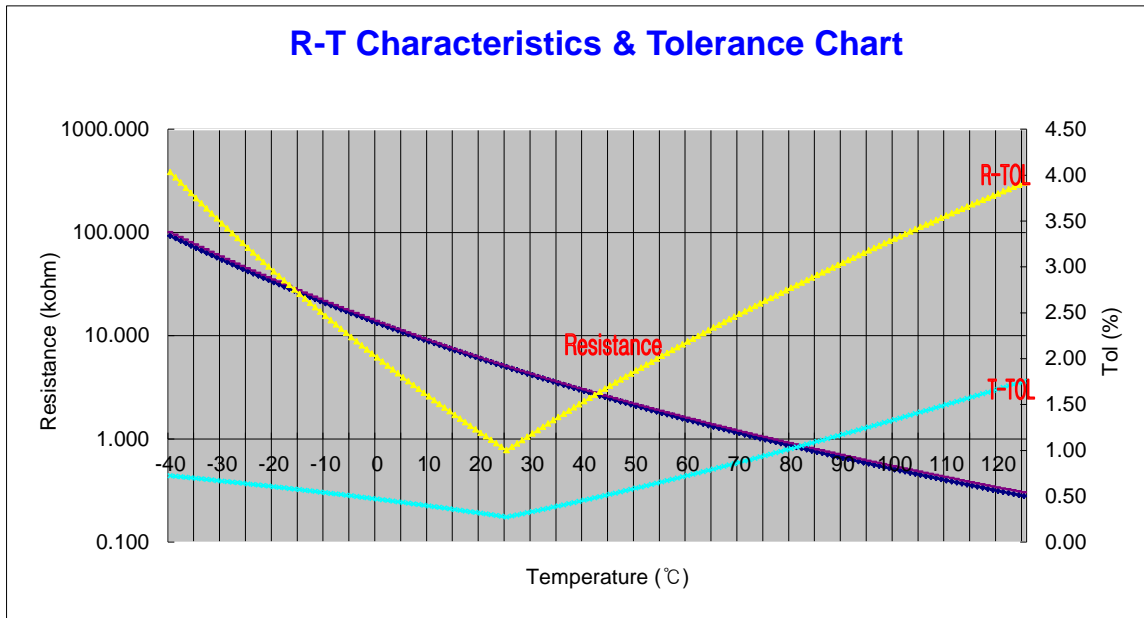
- OHMIC RESISTANCE  $5K\Omega \pm 1\%$  TO TEMPERATURE OF  $25^{\circ}C$
- BETA (25/85) =  $3324K \pm 1\%$
- OPERATION TEMPERATURE :  $-40^{\circ}C$  TO  $70^{\circ}C$
- INSULATION RESISTANCE :  $500VDC / 60s / 100M\Omega$
- ELECTRIC STRENGTH :  $1250VAC / 60s$
- EXTRACTION RESISTANCE BETWEEN WIRE AND PACKAGE :  $3kgf / 60s$
- RT TABLE : REFER TO THE ATTACHMENT

10	TPA	1	35965-0292(RED)	MOLEX				
9	Housing	1	35965-0200	MOLEX				
8	Terminal	2	35746-0110	MOLEX				
7	Lead Wire	2	PVC AWG26*2 105°C $\phi 1.3$	YELLOW				
6	Case (보호관)	1	PBT OD7.0*L25.0	WHITE				
5	Epoxy (충진용)	정량	ME105/HY680	WHITE				
4	Epoxy (디핑용)	정량	DN801/HB2360/ED44K	BLACK				
3	Silicon	정량	KR-255					
2	Solder	정량	Pb Free					
1	Thermistor	1	RA502F3324F02	Joinset				
NO	PARTS NAME	Q'TY	SPEC	REMARK				
SCALE	UNIT	TOLERANCE		DRAWING	CHECKED	APPROVED	NAME	THERMISTOR SENSOR DA32-00006D
-	MM	-		S. C. KIM			CODE N.L.	
				SEP-02-2013			USER CODE N.L.	

SYM	REVISION	DESCRIPTION	DATE	REVISER	APPROVER

INCHANG ELECTRONICS CO.,LTD.

USER CODE N.L. - SHEET /



Part no . RA502F3324F02

(Unit : kohm)

TEMP(C)	MIN	MEAN	MAX	R-TOL(MIN)	R-TOL(MAX)	T-TOL(MIN)	T-TOL(MAX)
-40	<b>92.492</b>	<b>96.230</b>	<b>100.110</b>	<b>3.88</b>	<b>4.03</b>	<b>0.70</b>	<b>0.72</b>
-39	87.538	91.025	94.642	3.83	3.97	0.69	0.72
-38	82.879	86.133	89.507	3.78	3.92	0.69	0.71
-37	78.497	81.534	84.681	3.73	3.86	0.68	0.70
-36	74.372	77.208	80.144	3.67	3.80	0.68	0.70
-35	<b>70.490</b>	<b>73.138</b>	<b>75.878</b>	<b>3.62</b>	<b>3.75</b>	<b>0.67</b>	<b>0.69</b>
-34	66.833	69.307	71.864	3.57	3.69	0.66	0.69
-33	63.388	65.699	68.088	3.52	3.64	0.66	0.68
-32	60.142	62.302	64.532	3.47	3.58	0.65	0.68
-31	57.082	59.100	61.184	3.42	3.53	0.65	0.67
-30	<b>54.196</b>	<b>56.083</b>	<b>58.030</b>	<b>3.36</b>	<b>3.47</b>	<b>0.64</b>	<b>0.66</b>
-29	51.473	53.238	55.057	3.31	3.42	0.64	0.66
-28	48.904	50.554	52.255	3.26	3.36	0.63	0.65
-27	46.479	48.022	49.612	3.21	3.31	0.63	0.65
-26	44.188	45.633	47.119	3.17	3.26	0.62	0.64
-25	<b>42.025</b>	<b>43.376</b>	<b>44.767</b>	<b>3.12</b>	<b>3.21</b>	<b>0.62</b>	<b>0.63</b>
-24	39.980	41.245	42.546	3.07	3.15	0.61	0.63
-23	38.048	39.232	40.449	3.02	3.10	0.60	0.62
-22	36.220	37.329	38.468	2.97	3.05	0.60	0.62
-21	34.492	35.530	36.596	2.92	3.00	0.59	0.61
-20	<b>32.856</b>	<b>33.828</b>	<b>34.826</b>	<b>2.87</b>	<b>2.95</b>	<b>0.59</b>	<b>0.60</b>
-19	31.308	32.219	33.153	2.83	2.90	0.58	0.60
-18	29.842	30.695	31.570	2.78	2.85	0.58	0.59
-17	28.454	29.253	30.072	2.73	2.80	0.57	0.58
-16	27.138	27.888	28.655	2.69	2.75	0.56	0.58
-15	<b>25.892</b>	<b>26.594</b>	<b>27.313</b>	<b>2.64</b>	<b>2.70</b>	<b>0.56</b>	<b>0.57</b>
-14	24.710	25.368	26.042	2.59	2.65	0.55	0.56
-13	23.589	24.206	24.837	2.55	2.61	0.55	0.56
-12	22.526	23.105	23.696	2.50	2.56	0.54	0.55
-11	21.518	22.060	22.614	2.46	2.51	0.53	0.54
-10	<b>20.560</b>	<b>21.069</b>	<b>21.588</b>	<b>2.41</b>	<b>2.46</b>	<b>0.53</b>	<b>0.54</b>
-9	19.651	20.128	20.614	2.37	2.42	0.52	0.53
-8	18.788	19.235	19.691	2.32	2.37	0.51	0.52
-7	17.967	18.387	18.814	2.28	2.32	0.51	0.52
-6	17.188	17.581	17.982	2.24	2.28	0.50	0.51
-5	<b>16.447</b>	<b>16.816</b>	<b>17.191</b>	<b>2.19</b>	<b>2.23</b>	<b>0.49</b>	<b>0.50</b>
-4	15.742	16.088	16.440	2.15	2.19	0.49	0.50
-3	15.072	15.396	15.726	2.11	2.14	0.48	0.49
-2	14.434	14.738	15.048	2.06	2.10	0.47	0.48
-1	13.827	14.113	14.402	2.02	2.05	0.47	0.47
0	<b>13.249</b>	<b>13.517</b>	<b>13.789</b>	<b>1.98</b>	<b>2.01</b>	<b>0.46</b>	<b>0.47</b>

TEMP(C)	MIN	MEAN	MAX	R-TOL(MIN)	R-TOL(MAX)	T-TOL(MIN)	T-TOL(MAX)
1	12.699	12.950	13.205	1.94	1.97	0.45	0.46
2	12.175	12.410	12.649	1.90	1.92	0.45	0.45
3	11.676	11.896	12.120	1.85	1.88	0.44	0.45
4	11.200	11.407	11.616	1.81	1.84	0.43	0.44
<b>5</b>	<b>10.746</b>	<b>10.940</b>	<b>11.136</b>	<b>1.77</b>	<b>1.79</b>	<b>0.43</b>	<b>0.43</b>
6	10.314	10.495	10.679	1.73	1.75	0.42	0.42
7	9.901	10.071	10.244	1.69	1.71	0.41	0.42
8	9.507	9.667	9.828	1.65	1.67	0.40	0.41
9	9.132	9.281	9.432	1.61	1.63	0.40	0.40
<b>10</b>	<b>8.773</b>	<b>8.913</b>	<b>9.054</b>	<b>1.57</b>	<b>1.59</b>	<b>0.39</b>	<b>0.39</b>
11	8.430	8.562	8.694	1.53	1.54	0.38	0.39
12	8.103	8.226	8.350	1.49	1.50	0.37	0.38
13	7.791	7.906	8.021	1.45	1.46	0.37	0.37
14	7.492	7.600	7.708	1.41	1.42	0.36	0.36
<b>15</b>	<b>7.207</b>	<b>7.307</b>	<b>7.408</b>	<b>1.37</b>	<b>1.38</b>	<b>0.35</b>	<b>0.35</b>
16	6.934	7.028	7.122	1.34	1.34	0.34	0.35
17	6.673	6.761	6.849	1.30	1.31	0.34	0.34
18	6.423	6.505	6.588	1.26	1.27	0.33	0.33
19	6.184	6.261	6.338	1.22	1.23	0.32	0.32
<b>20</b>	<b>5.956</b>	<b>6.027</b>	<b>6.099</b>	<b>1.18</b>	<b>1.19</b>	<b>0.31</b>	<b>0.31</b>
21	5.737	5.803	5.870	1.15	1.15	0.30	0.31
22	5.527	5.589	5.651	1.11	1.11	0.30	0.30
23	5.327	5.384	5.442	1.07	1.07	0.29	0.29
24	5.134	5.188	5.242	1.04	1.04	0.28	0.28
<b>25</b>	<b>4.950</b>	<b>5.000</b>	<b>5.050</b>	<b>1.00</b>	<b>1.00</b>	<b>0.27</b>	<b>0.27</b>
26	4.770	4.820	4.870	1.04	1.04	0.28	0.28
27	4.597	4.647	4.697	1.07	1.07	0.29	0.30
28	4.432	4.482	4.532	1.11	1.11	0.31	0.31
29	4.274	4.323	4.373	1.14	1.15	0.32	0.32
<b>30</b>	<b>4.122</b>	<b>4.171</b>	<b>4.220</b>	<b>1.18</b>	<b>1.18</b>	<b>0.33</b>	<b>0.33</b>
31	3.976	4.025	4.074	1.21	1.22	0.34	0.34
32	3.836	3.885	3.934	1.25	1.26	0.35	0.36
33	3.703	3.751	3.799	1.28	1.29	0.37	0.37
34	3.574	3.622	3.670	1.32	1.33	0.38	0.38
<b>35</b>	<b>3.451</b>	<b>3.498</b>	<b>3.546</b>	<b>1.35</b>	<b>1.36</b>	<b>0.39</b>	<b>0.39</b>
36	3.332	3.379	3.426	1.39	1.40	0.40	0.40
37	3.218	3.265	3.312	1.42	1.43	0.41	0.42
38	3.109	3.155	3.201	1.45	1.47	0.43	0.43
39	3.004	3.050	3.095	1.49	1.50	0.44	0.44
<b>40</b>	<b>2.903</b>	<b>2.948</b>	<b>2.994</b>	<b>1.52</b>	<b>1.53</b>	<b>0.45</b>	<b>0.46</b>
41	2.807	2.851	2.896	1.55	1.57	0.46	0.47
42	2.713	2.757	2.801	1.59	1.60	0.48	0.48
43	2.624	2.667	2.711	1.62	1.64	0.49	0.49
44	2.538	2.581	2.624	1.65	1.67	0.50	0.51
<b>45</b>	<b>2.455</b>	<b>2.497</b>	<b>2.540</b>	<b>1.68</b>	<b>1.70</b>	<b>0.51</b>	<b>0.52</b>
46	2.375	2.417	2.459	1.72	1.74	0.53	0.53
47	2.299	2.340	2.381	1.75	1.77	0.54	0.55
48	2.225	2.265	2.306	1.78	1.80	0.55	0.56
49	2.154	2.194	2.234	1.81	1.84	0.57	0.57
<b>50</b>	<b>2.086</b>	<b>2.125</b>	<b>2.165</b>	<b>1.84</b>	<b>1.87</b>	<b>0.58</b>	<b>0.59</b>
51	2.020	2.058	2.098	1.87	1.90	0.59	0.60
52	1.956	1.994	2.033	1.91	1.93	0.60	0.61
53	1.895	1.933	1.971	1.94	1.96	0.62	0.63
54	1.837	1.873	1.911	1.97	2.00	0.63	0.64
<b>55</b>	<b>1.780</b>	<b>1.816</b>	<b>1.853</b>	<b>2.00</b>	<b>2.03</b>	<b>0.64</b>	<b>0.65</b>
56	1.725	1.761	1.797	2.03	2.06	0.66	0.67
57	1.672	1.708	1.743	2.06	2.09	0.67	0.68
58	1.622	1.656	1.691	2.09	2.12	0.68	0.70
59	1.573	1.607	1.641	2.12	2.15	0.70	0.71
<b>60</b>	<b>1.525</b>	<b>1.559</b>	<b>1.593</b>	<b>2.15</b>	<b>2.18</b>	<b>0.71</b>	<b>0.72</b>
61	1.480	1.513	1.546	2.18	2.21	0.73	0.74
62	1.436	1.468	1.501	2.21	2.25	0.74	0.75
63	1.393	1.425	1.457	2.23	2.28	0.75	0.77
64	1.352	1.383	1.415	2.26	2.31	0.77	0.78
<b>65</b>	<b>1.312</b>	<b>1.343</b>	<b>1.375</b>	<b>2.29</b>	<b>2.34</b>	<b>0.78</b>	<b>0.80</b>
66	1.274	1.304	1.335	2.32	2.37	0.79	0.81

TEMP(C)	MIN	MEAN	MAX	R-TOL(MIN)	R-TOL(MAX)	T-TOL(MIN)	T-TOL(MAX)
67	1.237	1.267	1.297	2.35	2.40	0.81	0.82
68	1.202	1.231	1.261	2.38	2.43	0.82	0.84
69	1.167	1.196	1.225	2.41	2.46	0.84	0.85
<b>70</b>	<b>1.134</b>	<b>1.162</b>	<b>1.191</b>	<b>2.43</b>	<b>2.48</b>	<b>0.85</b>	<b>0.87</b>
71	1.102	1.129	1.158	2.46	2.51	0.86	0.88
72	1.070	1.098	1.126	2.49	2.54	0.88	0.90
73	1.040	1.067	1.095	2.52	2.57	0.89	0.91
74	1.011	1.038	1.065	2.54	2.60	0.91	0.93
<b>75</b>	<b>0.983</b>	<b>1.009</b>	<b>1.036</b>	<b>2.57</b>	<b>2.63</b>	<b>0.92</b>	<b>0.94</b>
76	0.956	0.981	1.007	2.60	2.66	0.94	0.96
77	0.929	0.954	0.980	2.63	2.69	0.95	0.97
78	0.904	0.929	0.954	2.65	2.71	0.97	0.99
79	0.879	0.903	0.928	2.68	2.74	0.98	1.00
<b>80</b>	<b>0.855</b>	<b>0.879</b>	<b>0.904</b>	<b>2.71</b>	<b>2.77</b>	<b>0.99</b>	<b>1.02</b>
81	0.832	0.856	0.880	2.73	2.80	1.01	1.03
82	0.810	0.833	0.856	2.76	2.83	1.02	1.05
83	0.788	0.811	0.834	2.78	2.85	1.04	1.06
84	0.767	0.789	0.812	2.81	2.88	1.05	1.08
<b>85</b>	<b>0.747</b>	<b>0.769</b>	<b>0.791</b>	<b>2.84</b>	<b>2.91</b>	<b>1.07</b>	<b>1.10</b>
86	0.727	0.748	0.770	2.86	2.94	1.08	1.11
87	0.708	0.729	0.751	2.89	2.96	1.10	1.13
88	0.689	0.710	0.731	2.91	2.99	1.11	1.14
89	0.671	0.692	0.713	2.94	3.02	1.13	1.16
<b>90</b>	<b>0.654</b>	<b>0.674</b>	<b>0.695</b>	<b>2.96</b>	<b>3.04</b>	<b>1.14</b>	<b>1.17</b>
91	0.637	0.657	0.677	2.99	3.07	1.16	1.19
92	0.621	0.640	0.660	3.01	3.10	1.17	1.20
93	0.605	0.624	0.643	3.04	3.12	1.19	1.22
94	0.590	0.608	0.627	3.06	3.15	1.20	1.24
<b>95</b>	<b>0.575</b>	<b>0.593</b>	<b>0.612</b>	<b>3.09</b>	<b>3.18</b>	<b>1.22</b>	<b>1.25</b>
96	0.560	0.578	0.597	3.11	3.20	1.23	1.27
97	0.546	0.564	0.582	3.14	3.23	1.25	1.28
98	0.532	0.550	0.568	3.16	3.25	1.26	1.30
99	0.519	0.536	0.554	3.19	3.28	1.28	1.32
<b>100</b>	<b>0.506</b>	<b>0.523</b>	<b>0.540</b>	<b>3.21</b>	<b>3.31</b>	<b>1.29</b>	<b>1.33</b>
101	0.494	0.510	0.527	3.23	3.33	1.31	1.35
102	0.482	0.498	0.515	3.26	3.36	1.33	1.37
103	0.470	0.486	0.502	3.28	3.38	1.34	1.38
104	0.459	0.474	0.490	3.30	3.41	1.36	1.40
<b>105</b>	<b>0.447</b>	<b>0.463</b>	<b>0.479</b>	<b>3.33</b>	<b>3.43</b>	<b>1.37</b>	<b>1.42</b>
106	0.437	0.452	0.467	3.35	3.46	1.39	1.43
107	0.426	0.441	0.456	3.37	3.48	1.40	1.45
108	0.416	0.431	0.446	3.40	3.51	1.42	1.46
109	0.406	0.420	0.435	3.42	3.53	1.43	1.48
<b>110</b>	<b>0.396</b>	<b>0.411</b>	<b>0.425</b>	<b>3.44</b>	<b>3.56</b>	<b>1.45</b>	<b>1.50</b>
111	0.387	0.401	0.415	3.47	3.58	1.47	1.51
112	0.378	0.392	0.406	3.49	3.61	1.48	1.53
113	0.369	0.382	0.396	3.51	3.63	1.50	1.55
114	0.360	0.374	0.387	3.53	3.65	1.51	1.56
<b>115</b>	<b>0.352</b>	<b>0.365</b>	<b>0.378</b>	<b>3.56</b>	<b>3.68</b>	<b>1.53</b>	<b>1.58</b>
116	0.344	0.357	0.370	3.58	3.70	1.55	1.60
117	0.336	0.349	0.361	3.60	3.73	1.56	1.62
118	0.328	0.341	0.353	3.62	3.75	1.58	1.63
119	0.321	0.333	0.345	3.65	3.77	1.59	1.65
<b>120</b>	<b>0.313</b>	<b>0.325</b>	<b>0.338</b>	<b>3.67</b>	<b>3.80</b>	<b>1.61</b>	<b>1.67</b>
121	0.306	0.318	0.330	3.69	3.82	1.63	1.68
122	0.299	0.311	0.323	3.71	3.84	1.64	1.70
123	0.293	0.304	0.316	3.73	3.87	1.66	1.72
124	0.286	0.297	0.309	3.76	3.89	1.67	1.73
<b>125</b>	<b>0.280</b>	<b>0.291</b>	<b>0.302</b>	<b>3.78</b>	<b>3.91</b>	<b>1.69</b>	<b>1.75</b>