



SCIENTIFIC INSTRUMENTS

Silicon Diode Thermometer

Sensor Model: Si435

Calibration Current: 10 µA

Typical Response (V vs. T) 020-137

Temp. K	+0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0
0	1.36089	1.66751	1.64531	1.61210	1.57373	1.53247	1.49094	1.45196	1.41723	1.38705
10	1.18193	1.33785	1.31699	1.29756	1.27912	1.26154	1.24489	1.22917	1.21406	1.19855
20	1.10465	1.16246	1.13841	1.12425	1.11828	1.11480	1.11217	1.10996	1.10828	1.10643
30	1.08821	1.10295	1.10124	1.09952	1.09791	1.09629	1.09468	1.09306	1.09145	1.08983
40	1.07188	1.08659	1.08497	1.08334	1.08171	1.08008	1.07844	1.07681	1.07517	1.07353
50	1.05528	1.07023	1.06858	1.06693	1.06528	1.06362	1.06196	1.06029	1.05863	1.05696
60	1.03839	1.05360	1.05192	1.05024	1.04856	1.04687	1.04518	1.04349	1.04179	1.04010
70	1.02127	1.03669	1.03498	1.03327	1.03156	1.02985	1.02814	1.02642	1.02471	1.02299
80	1.00393	1.01957	1.01785	1.01612	1.01439	1.01267	1.01093	1.00918	1.00744	1.00569
90	0.98615	1.00218	1.00042	0.99865	0.99687	0.99510	0.99332	0.99153	0.98975	0.98795
100	0.96794	0.98434	0.98254	0.98073	0.97891	0.97710	0.97527	0.97344	0.97161	0.96978
110	0.94927	0.96609	0.96424	0.96239	0.96053	0.95867	0.95680	0.95492	0.95304	0.95116
120	0.93008	0.94738	0.94549	0.94358	0.94167	0.93976	0.93785	0.93592	0.93398	0.93203
130	0.91021	0.92812	0.92616	0.92418	0.92221	0.92022	0.91823	0.91623	0.91423	0.91222
140	0.890819	0.90819	0.90617	0.90414	0.90212	0.90008	0.89805	0.89601	0.89397	0.89193
150	0.88988	0.88783	0.88578	0.88372	0.88166	0.87959	0.87752	0.87545	0.87337	0.87129
160	0.86921	0.86712	0.86503	0.86294	0.86084	0.85874	0.85664	0.85453	0.85242	0.85030
170	0.84818	0.84606	0.84393	0.84180	0.83967	0.83754	0.83540	0.83325	0.83111	0.82896
180	0.82680	0.82465	0.82249	0.82032	0.81816	0.81599	0.81381	0.81163	0.80945	0.80727
190	0.80508	0.80290	0.80071	0.79851	0.79632	0.79412	0.79192	0.78972	0.78752	0.78532
200	0.78311	0.78094	0.77879	0.77668	0.77452	0.77235	0.77018	0.76801	0.76583	0.76365
210	0.76094	0.75871	0.75648	0.75425	0.75202	0.74978	0.74755	0.74532	0.74308	0.74085
220	0.73861	0.73638	0.73414	0.73191	0.72967	0.72743	0.72520	0.72296	0.72072	0.71848
230	0.71624	0.71400	0.71176	0.70951	0.70727	0.70503	0.70278	0.70054	0.69829	0.69604
240	0.69379	0.69154	0.68929	0.68704	0.68479	0.68253	0.68028	0.67802	0.67576	0.67351
250	0.67124	0.66898	0.66672	0.66445	0.66219	0.65992	0.65765	0.65538	0.65310	0.65083
260	0.64855	0.64628	0.64400	0.64172	0.63944	0.63716	0.63487	0.63259	0.63030	0.62802
270	0.62573	0.62344	0.62115	0.61885	0.61656	0.61427	0.61197	0.60968	0.60738	0.60509
280	0.60279	0.60050	0.59820	0.59590	0.59360	0.59131	0.58901	0.58671	0.58441	0.58211
290	0.57980	0.57750	0.57520	0.57289	0.57059	0.56828	0.56598	0.56367	0.56136	0.55905
300	0.55674	0.55443	0.55211	0.54980	0.54748	0.54516	0.54285	0.54053	0.53820	0.53588
310	0.53356	0.53123	0.52891	0.52658	0.52425	0.52192	0.51958	0.51725	0.51492	0.51258
320	0.51024	0.50790	0.50556	0.50322	0.50088	0.49854	0.49620	0.49385	0.49151	0.48916
330	0.48681	0.48446	0.48212	0.47977	0.47741	0.47506	0.47271	0.47036	0.46801	0.46565
340	0.46330	0.46095	0.45860	0.45624	0.45389	0.45154	0.44918	0.44683	0.44447	0.44212
350	0.43976	0.43741	0.43505	0.43270	0.43034	0.42799	0.42563	0.42327	0.42092	0.41856
360	0.41620	0.41384	0.41149	0.40913	0.40677	0.40442	0.40206	0.39970	0.39735	0.39499
370	0.39263	0.39027	0.38792	0.38556	0.38320	0.38085	0.37849	0.37613	0.37378	0.37142
380	0.36906	0.36670	0.36435	0.36199	0.35963	0.35728	0.35492	0.35256	0.35021	0.34785
390	0.34549	0.34313	0.34078	0.33842	0.33606	0.33371	0.33135	0.32899	0.32664	0.32428
400	0.32192									

Record of Revisions

Rev	ECN#	Description	Rev by	Date	Appr by	Date
-		Initial Release	ABK	4/15/16	<i>AKR</i>	4/15/16



Cryogenic Temperature Sensors and Instruments • Cryogenic Temperature Probes
LNG Analysis & Tank Gauging Solutions • Engineering and Design Services

4400 W. Tiffany Drive, West Palm Beach, Florida 33407 USA • P: (561) 881-8500 • T: (800) 466-6031 • F: (561) 881-8556
info@scientificinstruments.com • www.scientificinstruments.com

