

2553A Temperature generation for Thermocouple (Detail)

Type	Setting Temperature	Stability (1 h)	Accuracy (1 year)	Temperature Coefficient	Reference Junction Compensation Error
	°C	±°C	±°C	×10 ⁻³ °C/°C	±°C
R	-50	0.50	1.10	0.88	0.56
	0	0.30	0.80	0.00	0.41
	100	0.25	0.55	0.88	0.28
	600	0.15	0.40	3.40	0.19
	1600	0.15	0.40	8.52	0.16
	1768	0.20	0.45	8.69	0.18
S	-50	0.40	1.03	0.93	0.52
	0	0.30	0.75	0.00	0.38
	100	0.25	0.56	0.90	0.28
	400	0.20	0.47	3.44	0.22
	1600	0.20	0.44	8.54	0.18
	1768	0.20	0.51	10.46	0.20
B	400	0.40	1.00	0.90	0.04
	600	0.30	0.70	1.75	0.03
	1000	0.20	0.50	3.40	0.02
	1200	0.20	0.44	4.27	0.02
	1820	0.20	0.44	6.91	0.02
J	-210	0.10	0.25	2.83	0.84
	-100	0.05	0.11	0.86	0.40
	0	0.05	0.08	0.00	0.32
	1200	0.10	0.15	6.68	0.29
T	-250	0.30	0.72	5.98	2.13
	-200	0.15	0.29	2.56	0.86
	-100	0.10	0.16	0.87	0.50
	100	0.05	0.10	0.85	0.30
	400	0.05	0.09	1.92	0.22
E	-250	0.20	0.50	5.95	2.07
	-200	0.10	0.20	2.56	0.82
	-100	0.05	0.10	0.85	0.44
	0	0.05	0.07	0.00	0.34
	1000	0.05	0.12	5.54	0.27
K	-250	0.40	0.94	7.71	2.65
	-200	0.15	0.30	2.55	0.84
	-100	0.10	0.15	0.86	0.44
	0	0.05	0.11	0.00	0.35
	800	0.10	0.15	4.26	0.32
	1300	0.10	0.21	7.67	0.38

Type	Setting Temperature	Stability (1 h)	Accuracy (1 year)	Temperature Coefficient	Reference Junction Compensation Error
	°C	±°C	±°C	×10 ⁻³ °C/°C	±°C
N	-240	0.40	1.00	5.10	1.99
	-200	0.20	0.44	2.56	0.87
	-100	0.10	0.21	0.87	0.43
	0	0.10	0.16	0.00	0.34
	800	0.10	0.15	3.92	0.22
	1300	0.10	0.20	7.32	0.25
C	0	0.15	0.30	0.00	0.34
	200	0.10	0.26	1.72	0.27
	600	0.10	0.25	3.40	0.24
	1000	0.15	0.30	6.81	0.25
	2000	0.20	0.51	15.30	0.37
	2315	0.25	0.70	20.72	0.51
A	0	0.15	0.34	0.00	0.35
	100	0.10	0.29	0.87	0.29
	600	0.10	0.28	3.42	0.25
	1600	0.15	0.47	11.10	0.35
	2500	0.20	0.79	22.68	0.54

Resolution : 0.1°C

Output resistance : Approx. 1 Ω

Temperature scale is ITS-90.

Accuracy for 23±5°C, stability for 23±1°C. Add Temperature Coefficient for 5 to 18°C and 28 to 40°C.

Accuracy doesn't include the thermocouple's error.

Reference Junction Compensation Error is applied as additional value to Accuracy every ±0.3°C reference junction temperature measurement error occurrence, when using reference junction compensation.

When using internal reference junction compensation, the temperature measurement accuracy is ±0.3°C.

Reference junction temperature measurement accuracy is ±0.3°C(typical), when 2553A is used with accessory 257875.

Accuracy for temperature between setting temperature is calculated by linear interpolation. In case of adding Temperature Coefficient or Reference Junction Compensation Error, use added accuracy to calculate linear interpolation.

Accuracy not shown in above table is ±(60ppm + 4uV) for generated voltage.