

Table F-4

Type K inverse function polynomial

	-200°C to 0°C (-5,891μV to 0μV)	0°C to 500°C (0μV to 20,644μV)	500°C to 1,372°C (20,644μV to 54,886μV)
$c_0 =$	0.0	0.0	$-1.318\,058 \times 10^2$
$c_1 =$	$2.517\,346\,2 \times 10^{-2}$	$2.508\,355\,2 \times 10^{-2}$	$4.830\,222 \times 10^{-2}$
$c_2 =$	$-1.166\,287\,8 \times 10^{-6}$	$7.860\,106\,2 \times 10^{-8}$	$-1.646\,031 \times 10^{-6}$
$c_3 =$	$-1.083\,363\,8 \times 10^{-9}$	$-2.503\,131\,2 \times 10^{-10}$	$5.464\,731 \times 10^{-11}$
$c_4 =$	$-8.977\,354\,0 \times 10^{-13}$	$8.315\,270\,2 \times 10^{-14}$	$-9.650\,715 \times 10^{-16}$
$c_5 =$	$-3.734\,237\,7 \times 10^{-16}$	$-1.228\,034\,2 \times 10^{-17}$	$8.802\,193 \times 10^{-21}$
$c_6 =$	$-8.663\,264\,3 \times 10^{-20}$	$9.804\,036\,2 \times 10^{-22}$	$-3.110\,810 \times 10^{-26}$
$c_7 =$	$-1.045\,059\,8 \times 10^{-23}$	$-4.413\,030\,2 \times 10^{-26}$	
$c_8 =$	$-5.192\,057\,7 \times 10^{-28}$	$1.057\,734\,2 \times 10^{-30}$	
$c_9 =$		$-1.052\,755\,2 \times 10^{-35}$	
Error:	0.04°C to -0.02°C	0.04°C to -0.05°C	0.06°C to -0.05°C
$t_{90} = c_0 + c_1E + c_2E^2 + c_3E^3 \dots c_iE^i$ where: t_{90} is the calculated temperature in °C. E is the measured voltage in microvolts.			

Table F-5

Type N inverse function polynomial

	-200°C to 0°C (-3,990μV to 0μV)	0°C to 600°C (0μV to 20,613μV)	600°C to 1,300°C (20,613μV to 47,513μV)
$c_0 =$	0.0	0.0	$1.972\,485 \times 10^1$
$c_1 =$	$3.843\,684\,7 \times 10^{-2}$	$3.868\,96 \times 10^{-2}$	$3.300\,943 \times 10^{-2}$
$c_2 =$	$1.101\,048\,5 \times 10^{-6}$	$-1.082\,67 \times 10^{-6}$	$-3.915\,159 \times 10^{-7}$
$c_3 =$	$5.222\,931\,2 \times 10^{-9}$	$4.702\,05 \times 10^{-11}$	$9.855\,391 \times 10^{-12}$
$c_4 =$	$7.206\,052\,5 \times 10^{-12}$	$-2.121\,69 \times 10^{-18}$	$-1.274\,371 \times 10^{-16}$
$c_5 =$	$5.848\,858\,6 \times 10^{-15}$	$-1.172\,72 \times 10^{-19}$	$7.767\,022 \times 10^{-22}$
$c_6 =$	$2.775\,491\,6 \times 10^{-18}$	$5.392\,80 \times 10^{-24}$	
$c_7 =$	$7.707\,516\,6 \times 10^{-22}$	$-7.981\,56 \times 10^{-29}$	
$c_8 =$	$1.158\,266\,5 \times 10^{-25}$		
$c_9 =$	$7.313\,886\,8 \times 10^{-30}$		
Error:	0.03°C to -0.02°C	0.03°C to -0.02°C	0.02°C to -0.04°C
$t_{90} = c_0 + c_1E + c_2E^2 + c_3E^3 \dots c_iE^i$ where: t_{90} is the calculated temperature in °C. E is the measured voltage in microvolts.			