



### TCR Specification Data Set: Resistive Foil Specifications

Resistive material	NiCr	NCAS	CrSiO
Sheet resistance ( $\Omega/\text{sq}$ )	25, 50, 100	25, 50, 100, 250	1000
Sheet resistivity tolerance (%)	$\pm 5$	$\pm 5$	$\pm 7$
Temperature coefficient of resistance (ppm/ $^{\circ}\text{C}$ )	<110	-20	300
Base copper foil thickness (microns)	18, 35	18, 35	18, 35
Width maximum mm (inches)	1295 (51)	1295 (51)	1295 (51)
Maximum recommended power dissipation at 40 $^{\circ}$ C (watts/sq in)	25 $\Omega/\text{sq}$ : 250 50 $\Omega/\text{sq}$ : 200 100 $\Omega/\text{sq}$ : 150 —	25 $\Omega/\text{sq}$ : 250 50 $\Omega/\text{sq}$ : 200 100 $\Omega/\text{sq}$ : 150 250 $\Omega/\text{sq}$ : 75	1000 $\Omega/\text{sq}$ : 250
Recommended etching solutions			
1st etch	Cupric chloride	Ammoniacal*	Ammoniacal*
2nd etch	Ammoniacal	Acidic permanganate	Alkaline permanganate
3rd etch	—	Ammoniacal*	Ammoniacal*

*For base foil properties, please refer to the appropriate product application sheet.*

*\* For NCAS and CrSiO, cupric chloride can be used in place of ammoniacal etchant.*