

PROPERTY	DUPONT 943	DUPONT 951	FERRO A6M	FERRO A6S	HEREAUS HeraLock	HEREAUS CT 2000
Color	Light Blue	Blue	White	White	White	White
Available Fired Thickness (Mils)	1.8, 4.4, 8.8	1.7, 3.7, 5.2, 8.2	3.7, 7.4	3.7, 7.4	3.3	1.7 & 3.4
Dielectric Constant (K)	7.4	7.28	5.9	5.96	7.3	9.1
Loss Tangent	.2%	<.60%	.12%	.2%	-	<.26%
Mwave Insertion Loss (Db/in) @ 10Ghz	-	<.6	.18	-	-	-
Insulation Resistance	>10 ¹² Ohms	>10 ¹² Ohms	>10 ¹² Ohms	>10 ¹² Ohms	>10 ¹² Ohms	>10 ¹² Ohms
Breakdown Voltage	>1000 V/Mil	>1000 V/Mil	>900 V/Mil	>1000 V/Mil	>900 V/Mil	>1000 V/Mil
Flexural Strength	230 Mpa	207 Mpa*	>124 Mpa*	>124 Mpa*	-	310 MPa
Youngs Modulus (fired)	103 GPa	103 GPa	82 GPa	82 GPa	-	-
Temp. Coefficient of Freq. (T _f)	-	-	-	-	< 80 ppm	± 10 ppm
Fired Density	3.2	3.1 gm/cc	2.5 gm/cc	2.5 gm/cc	2.84	3.05
Surface Roughness	.64 μ m	<10 μ in	<15 μ in	<15 μ in	<.7 μ m	<1 μ in
Camber **	2 mils/in/in min.	2 mils/in/in min.	2 mils/in/in min.	2 mils/in/in min.	2 mils/in/in min.	2 mils/in/in min.
Shrinkage (Approximate)						
X,Y	19.5%±. 3%	12.7%±. 2%	14.8%±. 2%	14.5%±. 2%	.18%±. .013%	11.5%±. 2%
Z	10.3%±. 5%	15%±. 5%	25%±. 5%	35%±. 5%	36%	14%±. 5%
Metallizations	Au/Ag - Ag – Au & Cu	Au/Ag - Ag – Au & Cu	Au- Cu	Au/Ag - Ag – Au & Cu	Ag	Ag
Surface and Buried Resistor systems	Available	Available	Available	Available	Partial (See supplier)	Partial (See supplier)

* 3 point MOR test - 850°C firing temperature

** Minimum allowable camber

Information courtesy of DuPont, Ferro, Hereaus and CMAC MT