

DuPont Microcircuit Materials

Fodel® Selector Guide

Fodel® Dielectrics for High Density Interconnects

Properties	QM44F
Product Description	Photo patternable thick film dielectric compatible with Au, or Ag, conductors, or mixed metal configurations
Substrate	Alumina, Fodel® dielectric QM44F
Via Resolution	3 mil vias / 5 mil pitch
Fired Thickness	30-32 µm
Dielectric Constant (K @ 10 MHz)	8 to 10
Dissipation Factor	0.10%
Insulation Resistance	>10 ¹² Ohms @ 100VDC
Breakdown Voltage	>1000 V/mil
Firing Temperature	850°C

Fodel® Conductors for Wireless and High Density Interconnect

Properties	5989	6778	Q170P
Product Description	Gold Conductor	Silver Conductor	Ag/Pt Conductor
	High Density, 3 rd generation	High Density	High Density
Substrate	Alumina	Alumina	Alumina
Line Resolution Line / Space(µm)	40/50	50/50	50/50
Fired Thickness (µm)	7 to 9	8 to 10	8 to 10
Resistivity (m Ohms/square)	<6	<2.5	<4
Wire Bond Performance			
25 µm Au wire, thermosonic ball	>10g	n/a	n/a
25 µm Al ultrasonic, aged (aged, 315 C/1.25 Hours)	4 to 6	n/a	n/a
Adhesion (aged 48 Hrs @ 150°C)	n/a	20N	20N
Firing Temperature	850°C	850°C	850°C

- *Developmental products available.
- Note: This Selector Guide represents a cross section of the Fodel® product line. For information on products not listed in this guide, please contact your local DuPont Sales Representative.



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Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement" H50102



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