



DIAMOND COATINGS LIMITED

DIAMET SPUTTERED METAL COATINGS

DIAMOND COATINGS is a specialist supplier of metal and metal oxide coatings produced by magnetron sputtering. The **DIAMET** range of coatings includes copper, gold and alloys are available on flexible substrates whereas the **DIAMOX** metal oxide coatings, which include indium tin oxide and silicone oxide, are available on both flexible and sheet substrates.

METAL COATINGS AVAILABLE

COPPER	NICKEL	CHROMIUM	TIN
PALLADIUM	GOLD	SILVER	TITANIUM

ALLOYS AVAILABLE

INDIUM TIN OXIDE	NICHROME	STAINLESS STEEL	INCONEL
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SUBSTRATES AVAILABLE

POLYESTER	POLYCARBONATE
POLYIMIDE	POLYPROPYLENE

APPLICATIONS

DIAMET coatings are supplied to OEM's in the electronics industry and are used in the manufacture of:-

RESISTIVE TOUCH PANELS	EMI/RFI SHIELDING
FLEXIBLE PRINTED CIRCUITS	MEMBRANE SWITCHES
MEDICAL SENSORS	OPTICAL CLEAR HEATERS
BARRIER PRODUCTS	ELECTROLUMINESCENT LAMPS

PROPERTIES

The performance data and light transmission properties will depend on the type of substrate and coating thickness. Typical properties are summarized in the Table below.



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PROPERTIES OF DIAMET AND DIAMOX COATINGS

Coating	Substrate	Coating Thickness A	Optical *Trans %	Density	Electrical Resistance Ohms/sq
Copper	Polyimide	2000+/-200	N/A	N/A	0.2+/-0.05
Silver	Polyester	1000+/-25	N/A	3	0.3+/-0.05
Gold		400	N/A	3	2.2+/-0.3
Palladium	Polyimide	>500	N/A	N/A	<5.0
Nichrome	Polyester	>1000	N/A	3	N/A
ITO	PET	>150	>80		500
ITO	PET	200	>80		300
ITO	PET	>800	>80		20
ITO	PET	>800	>80		10
ITO	PET	> 80	>80		<8

*Light Transmission at 550nm

QUALITY ASSURANCE

It is the objective of Diamond to produce coatings to high quality standards consistent with commercial product requirements and appropriate standards.

Diamond is registered to ISO 9001:2000 and employs the practice of quality control throughout the manufacturing process.