



## INTRODUCTION

**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.

### PROPERTIES OF DIAMET AND DIAMOX COATINGS

Coating	Substrate	Coating Thickness A	*Trans %	Optical Destiny	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 9001:2002 and employs the practice of quality control throughout the manufacturing process.

