

High heat resistant PI resin coated metal

# COMET<sup>®</sup>

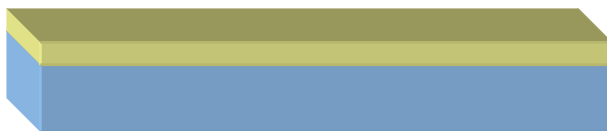
## ■ Characteristics

1. Heat resistance: is continuous 250°C
2. Excellent insulation
3. Superior surface flatness of plastic side.
4. Superior bonding strength. Superior to stamping property.

## ■ Applications

1. Solar cell substrate (watches)
2. Circuit board connector (computers)
3. Metal based wiring board
4. Electric parts

## ■ Specifications



← Polyimide resin (Both side possible)

← Metal substrates

Item	Standard
Metal substrates	Metallic board, foil (Stainless steel, Aluminum, Cupper)
Size	120 × 120mm
Thickness(metal)	150 μ
Thickness accuracy	± 10%
Membrane Thickness	10 μ
Accuracy	± 10%
Surface roughness	R max ≤ 0.1 μ
Flatness	Max Warpage: 1mm
Heat resistance	250°C (for common)
Protect film	Only Polyimide resin side * No adhesive layer

Please consult with us for other sizes and specifications.

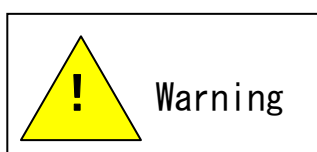
## ■ Physical properties

Items		Unit	Polyimide resin	Polyamideimide resin
Mechanical properties	Tensile strength	Mpa	196	98
	Elongation in tension	%	40	25
	Tensile modulus	Mpa	3730	2650
Electrical properties	Insulation resistance	$\Omega$ (DC500V $\times$ 1min)	$1.5 \times 10^{12}$	$1.5 \times 10^{12}$
	Dielectric breakdown strength	KV/ $25 \mu\text{m}$ (thickness)	3.8	1.5
	Dielectric constant	1MHz	4.7	3.4
	Dielectric loss tangent	1MHz	$7 \times 10^3$	$5 \times 10^3$
	Volume resistivity	DC125V ( $\Omega \cdot \text{cm}$ )	$5 \times 10^{16}$	$5 \times 10^{16}$
Chemical resistance	Strong Acid	25% $\times$ 5min (Sulfuric acid)	No change	No change
	Alkaline	5% NaOH	80°C $\times$ 10min	80°C $\times$ 10min
Heat resistance	Soldering	260°C $\times$ 30min	No change	No change
	Flame resistance	UL	94V-0	94V-0
	Glass transition temperature	°C	300°C	275°C

The values mentioned above are typical ones, not guaranteed ones.

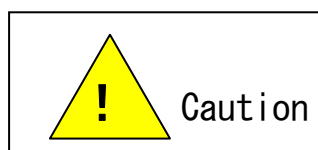
## ■ Important Safeguards

Directions for safe use are prepared for the purpose of maintaining the safety of customers and your clients and property. The products carrying warning and caution, please read the following details.



If this product is mishandled in defiance of this sign, you may have a risk of death or serious injury.

- Absolutely do not implant, insert in the body.
- Never use for any applications for which the material will be left in the body.
- In case of using for medical devices, foodstuff, other special purpose applications, please you test and make certain that you can do so safely.



- Don't use for foodstuff.
- During forming and carrying, wear proper protective gear to prevent possible injury to hands and fingers.