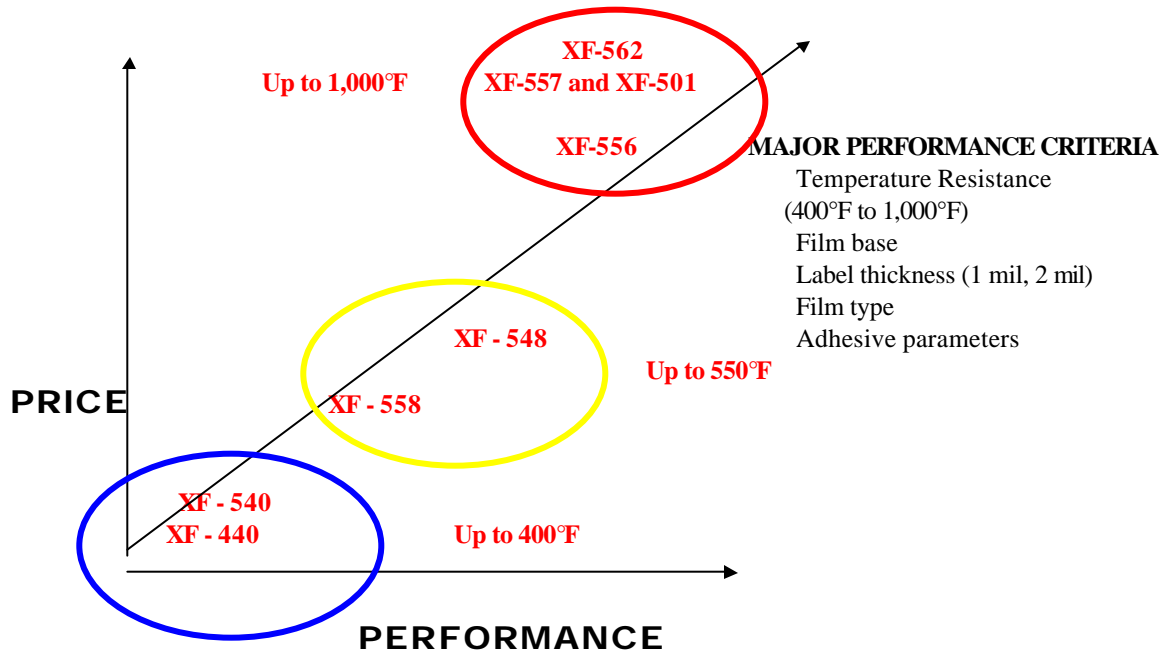


**POLYONICS' PSM MATCHES
 PRICE AND PERFORMANCE
 TO CUSTOMERS' REQUIREMENTS**

If you sell features not needed by the customer, you allow competition to sell value....i.e. you've oversold the customer. **POLYONICS THERMOGARD®** High Performance Label Materials provide a continuum of benefits that translate directly into **matched cost/benefit values**.

THERMOGARD® PRICE/PERFORMANCE PRODUCTS



OPTIONS:

Adhesives: Permanent, Removable (No residue)

Acrylic, Silicone

Static dissipative

Low outgassing

Thickness to your specification

Colors: White or amber as standard; color matching also available.

Gloss or matte surface

Liner: 40#, 50# SCK paper

1.5, 2.0 mil PET for cleanroom applications

Silicone free release liners

EXAMPLES of THERMOGARD® PRODUCT FAMILY

(For complete product listings see **THERMOGARD®** Product Line Overview)

PRODUCT NO.	FILM TYPE	THICKNESS (MIL)	ADHESIVE THICKNESS (MIL)	EFFECTIVE** SERVICE TEMPERATURE	COMMENTS
XF-440	POLYESTER	2	1	Up to 325° F	White, matte; not for automatic print/apply
XF-540	POLYMERIC	2	2	Up to 450° F	White, Semi gloss
XF-541	POLYIMIDE	2	2	Up to 1,000° F	L.yellow, matte
XF-548	POLYIMIDE	1	1	Up to 800° F	White, Matte; not for automatic print/apply
XF-551	POLYIMIDE	2	2	Up to 1,000° F	Yellow, Gloss
XF-555	POLYIMIDE	2	2	Up to 1,000° F	White, Semi gloss
XF-557	POLYIMIDE	2	2	Up to 1,000° F	White, Semi gloss
XF-501	POLYIMIDE	2	2	Up to 1,000° F	Tan, Semi gloss
XF-558	Modified POLYIMIDE	2	2	Up to 600° F	<u>Economical substitute</u> for polyimides for SMT applications.
XF-565	POLYIMIDE	2	2	Up to 1,000° F	White, matte

**** NOTE:** Effective Service Temperatures depend not only on the **temperature**, but also on the length of **time** that the label is exposed to that temperature. For example, XF-557 can withstand temperatures up to 1,000°F for a few seconds. It performs well at temperatures greater than 700°F for a few minutes, and above 500°F for hours. Similarly, the other THERMOGARD® products exhibit their own time/temperature Effective Service characteristics. Test each material thoroughly for individual process times and temperatures.

Each **POLYONICS®** product is tested rigorously with up to ten different ink ribbons, each on one of several printers. These labels are then subjected to a variety of chemicals, cleaners, fluxes, and solvents, under several different process environments. **Over 3500 individual tests have been performed on our THERMOGARD® product line.**