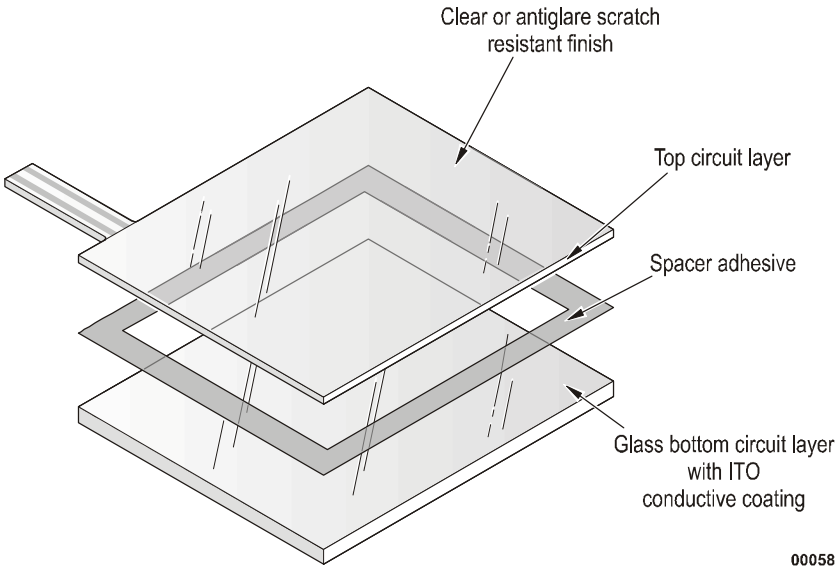
DYNAPRO
The **hands on** company

Dynaclear™ FG80 Resistive Touch Screen

Dynapro's Dynaclear-FG80 resisitive touch screen construction is an optically superior, smooth and flat touch interface designed for use in a variety of computer products. The Dynapro Flex-on-Glass® (FG) design uses fewer layers and is specially developed with a thinner and more transparent ITO, which results in 80% light transmission. Combine this with virtually invisible spacer dots, and it all adds up to a clearer and more optically appealing resisitive touch screen with brighter, more vivid images - even over low light displays.

Dynaclear-FG80 Touch Screen Construction



Specifications

Electrical

Operating Voltage	3.3 to 5 VDC
Sheet Resistance:	
Polyester	350 ± 22% Ω/square
Glass	300 to 600 Ω/ square
Linearity	+/- 1.5% full scale linearity error in either direction Dynapro document PS002
Insulation Resistance	20 MΩ@ 25 VDC, Dynapro test procedure TP0004

Optical

Total Light Transmission	80 to 81% typical (> 79% @ 550nm test). Dynapro test procedure TP0009
Clarity	Clear Finish - 22% Antiglare Finish - 14%
Workmanship Standards	Per Dynapro document PS014 Includes optical inspection standards for touch screen

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Environmental

After tests below, touch screen continued to meet electrical and optical performance specs.

Operating Temperature Range	-20°C to +50°C, 2 weeks at 50°C/90% RH, Dynapro test procedures TP0006, TP0007
Storage Temperature High	+70°C, 240 hour continuous at ambient humidity, Dynapro test procedure TP0003
Storage Temperature Low	-40°C, continuous at ambient humidity, Dynapro test procedure TP0005
Accelerated Aging	100 hours continuous exposure at +60°C/95% RH, Dynapro test procedure TP0001
Thermal Shock	25 cycles (one cycle is 30 min. alternating from -40°C to +70°C with less than 10 min. transfer time), Dynapro test procedure TP0008

Mechanical

Activation Method	Gloved or ungloved finger Delrin or plastic stylus (no metal) with 1mm radius full hemispherical tip
Activation Force	< 25g average with non-metal stylus < 50g average with 5/8" diameter silicone finger
Data is for .004" diameter, .140" pitch spacer dots	Custom activation force and palm rejection available Dynapro test procedure TP0002

Durability

Point Activation Life	>1 Million activations at a single point with a 5/8" diameter silicone finger with a 350g load at 2Hz
Character Activation Life	>100,000 characters written within a 20mm x 20mm area on the touch screen
Surface Finish Properties	4H or greater pencil hardness. Refer to *Touch Screen Surface Finishes Data Sheet 1005* for more details

Specifications subject to change without notice. All values are typical. Products are sold with the understanding that buyers will test them in actual use and determine the product's adaptability to their application. Touch screens must be installed per *Dynapro Custom Touch Screen Design Guide D-CDG 100 and Dynapro Touch Screen Integration Guide D-IG-100.* Failure to adhere to recommended installation may affect ability to meet specifications stated within this document.

Supporting Documents

Touch Screen Surface Finishes Data Sheet 1005
Test procedures: TP0001, TP0002, TP0003, TP0004 TP0005, TP0006, TP0007, TP0008, TP0009
Product Standards: Workmanship Standards for Dynapro Touch Screens PS014
Electrical Testing of Analog Resistive Touch Screens PS002

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For more information on our resistive stock products or custom design solutions, visit us at
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Dynapro simplifies interaction between people and technology by designing and manufacturing world class touch products, from touch screen components to touch computers, terminals, and monitors.

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