

# Thermal Pad XK-P20/P20S

## Introduction

This series of products are resilient and with large deformation, suitable for large institutional design tolerances. Single or Double layer structure, The Double layer is reinforced with special ultra-thin fabric to increase resistance and workability of punching, strip type, malformation designs. Self-adhesive and never recede. No corrosion to metal, environmentally friendly products.

## Features

Ultra conformable, "gel-like" modulus  
Designed for low-stress applications  
low hardness

## Applications

Telecommunications  
Computer, Between heat-generating semiconductor and a heat sink



	Unit	XK-P20					XK-P20S	Method
Reinforcement Carrier		-	-	-	-	-	Fiberglass	-
Inherent Surface Tack	1/2 Sided	2-side	2-side	2-side	2-side	2-side	2-side	-
Color	-	Pink	Pink	Pink	Pink	Pink	Pink	Visual
Thickness	mm	0.3~5.0	0.3~5.0	0.3~5.0	0.3~5.0	0.3~5.0	0.3~5.0	ASTM D 374
Specific Gravity	g/cm <sup>3</sup> ,±0.05	2.25	2.45	2.65	2.95	3.05	2.65	ASTM D 792
Hardness	Shore 00	40~70	40~70	40~70	45~70	45~70	40~70	ASTM D 2240
Thermal Impedance @0.5mm 14.5psi	°C.in <sup>2</sup> /W	≤0.95	≤0.85	≤0.70	≤0.65	≤0.55	≤0.85	ASTM D 5470
Thermal Conductivity	W/(m.K)	≥1.2	≥1.5	≥2.0	≥2.5	≥3.0	≥2.0	HOT DISK
Volume Resistivity	Ω.cm	≥10 <sup>13</sup>	≥10 <sup>13</sup>	≥10 <sup>13</sup>	≥10 <sup>13</sup>	≥10 <sup>13</sup>	≥10 <sup>13</sup>	ASTM D 257
Breakdown Voltage	kV/mm	≥10	≥10	≥10	≥10	≥10	≥10	ASTM D 149
Dielectric Constant	±1.0	5.5	6.5	6.5	6.5	6.5	8.5	ASTM D 150
Application Temperature	°C	-50~200	-50~200	-50~200	-50~200	-50~200	-50~200	DSC,UL 746B
Tensile Strength	Psi	≥18	≥15	≥15	≥15	≥12	≥120	ASTM D 412
Elongation	%	≥100	≥100	≥80	≥60	≥50	≥10	ASTM D 412
Siloxane Volatiles D4~D20	w,%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	GC-FID
Flammability	Vertical	V-0	V-0	V-0	V-0	V-0	V-0	UL 94