



E-Song America, Inc.

100%
RoHS Compliant
Products

1901 S. Bascom Ave., Prune Yard Tower I, Suite 1225, Campbell, CA 95008
Email: sales@esongamerica.com Tel. (408) 466-5446 FAX (408) 879-9373

THERMAL INTERFACE INSULATOR PAD: THEAI Series

■ Characteristic

This product is designed to provide a good thermal conductivity with electrical insulation and flame retardancy of UL94 V0. It is a composite of Polyimide and thermally conductive silicone. Best suited for power transistors, power semiconductors, motor controls, and thermistor. The reinforcing Kapton gives excellent cut through resistance. Fiber glass reinforcement is available for easier handling and enhancement against puncture, shear and tear. Available in rolls, kiss-cut sheets, or standard size sheets

■ Features

- High thickness accuracy
- High dielectric strength
- Low thermal impedance
- Good thermal conductivity
- Can be laminated with film or metallic foil
- Highly flexible

■ Application

- As thermally conductive insulator for semiconductor
- As thermally conductive spacer for power transistor
- For motor drive controls
- For high voltage power supplies
- As heat conductive media of heat generating, cooling and temperature sensors
- As cushion rubber for LCD.IC.FPC bonding (ACF bonding) process
- As compression joining material for thermistors and temperature sensors

■ Properties

	THEAI3014-09	THEAI5014-13
Thickness (mm)	0.15 ±0.02	0.15 ±0.02
Material (Binder, Filler, Reinforcement)	Silicone, Alumina, Kapton	Silicone, Ceramic, Kapton
Color	Gray	Blue / Pink
Thermal Conductivity 10psi (W/mk)	0.90	1.30
Specific Gravity (g/cm ³)	2.10	2.30
Hardness (Shore A)	80	85
Tensile Strength (MPa)	30	40
Elongation (%)	70	60
Tear Strength (kgf/cm)	12	12
Volume Resistivity (ohm-meter)	3.0 x 10 ¹⁴	5.0 x 10 ¹⁴
Dielectric Strength (kV)	25	28
Dielectric Constant (at 1KHz)	4.9	4.8
Continuous Usage Temp. (°C)	-60 to +180	-60 to +180
TEFLON Coating	Available as user option	Available as user option

