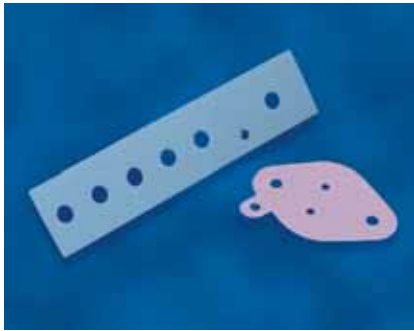


### Features and Benefits

- Bonded laminate
- Electrically isolating
- Copper shield between layers of Sil-Pad
- Pre-tinned 60/40 solder point for easy grounding



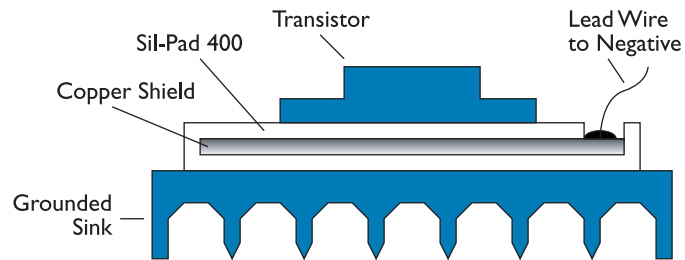
#### PROBLEM:

Radio Frequency Interference (RFI) is produced by heat sink current. The capacitance between a TO-3 encapsulated transistor and its heat sink is typically 100pf when a mica or other insulating washer is used. A power supply constructed with a standard insulator and a grounded heat sink can be expected to produce about 10 times more interference than is permitted.

#### SOLUTION:

1. The use of chokes, filters and LC networks which have to be designed into the circuitry
- OR
2. Constructing a shield between the transistor and its heat sink by replacing the mica insulator with a Sil-Pad Shield (see illustration).

TYPICAL PROPERTIES OF SIL-PAD SHIELD		
PROPERTY	VALUE	TEST METHOD
Thickness / Total (inches)	0.019	***
Shield / Copper Thickness (inches)	0.0015	***
Approx. Thermal Resistance (TO-3) (°C/W)	0.85 - 1.0	***
Min. Breakdown Voltage Between Device and Copper (Volts)	4500	ASTM D149
Capacitance @ 1000 Hz and 5 Volts (pF)	50	***
Dissipation Factor @ 1000 Hz and 5 Volts (Power Factor)	0.0155	ASTM D150
Dielectric Constant @ 1000 Hz and 5 Volts	5.5	ASTM D150
Continuous Use Temp. (°C)	-60 to 180	***
Recommended Torque (TO-3) (inch-pounds)	6-8	***



### Typical Applications Include:

- Switch mode power supplies
- EMI / RFI shield between PCB's

### Configurations Available:

Sil-Pad Shield is available in many custom configurations to meet special requirements. Tooling charges vary depending on tolerances and complexity of the part.

Sil-Pad Shield is a laminate of copper with Sil-Pad thermally conductive insulators. Sil-Pad Shield provides:

- Shielding effectiveness of 50dB or higher
- Good thermal transfer
- Reduced labor costs due to the elimination of having to apply thermal grease

Sil-Pad®: U.S. Patents 4,574,879; 4,602,125; 4,602,678; 4,685,987; 4,842,911 and others