

547-566/578

THERMAFLEX is a thermally conductive silicone rubber with high voltage insulating properties offering good heat transfer without the need for silicone grease.

Owing to the rubber softness it is ideal as an interface between uneven surfaces where low compression forces exist.

THERMAFLEX meets the UL flame retardant rating of 94V-O and can be supplied with pressure sensitive silicone adhesive as an assembly aid.

THERMAFLEX is available from stock in sheet form (30cm long) and can be cut to custom shapes and some outlines illustrated in the PAD OUTLINES section of this catalogue.

Typical applications include:

- * Insulating Semiconductors.
- * High voltage insulation in power supplies.
- * Insulating transformer bases.
- * Packing between metal surfaces.
- * Reducing component vibration.

ORDERING PROCEDURE FOR PARTS:-

THER-05NA-XXX NA = Non adhesive XXX = Part No. suffix
THER-05AC-XXX AC = Adhesive coat (See PAD OUTLINES)

UL FILE NUMBER E123456



TYPICAL PROPERTIES OF THERMAFLEX

PART PREFIX CODE	THER-05	THER-07	THER-10	THER-15	THER-20
THICKNESS (MM)	0.5 ± 0.10	0.7 ± 0.10	1.0 ± 0.15	1.5 ± 0.15	2.0 ± 0.15
BREAKDOWN VOLTAGE 50 HZ RMS	8,000	9,000	12,000	15,000	20,000
THERMAL RESISTANCE (TO-3) °C/WATT	0.92	1.09	1.28	-	-
THERMAL CONDUCTIVITY Wm ⁻¹ K ⁻¹	0.70	0.70	0.70	0.70	0.70
HARDNESS - SHORE MICRO	65 ± 5	65 ± 5	65 ± 5	65 ± 5	65 ± 5
TEAR RESISTANCE Nmm	4.7	4.7	4.7	4.7	4.7
TENSILE STRENGTH MPa	1.6	1.6	1.6	1.6	1.6
ELONGATION %	115	115	115	115	115
TEMPERATURE RANGE °C	-55 TO +180	-55 TO +180	-55 TO +180	-55 TO +180	-55 TO +180
COLOUR	GREY	GREY	GREY	GREY	GREY
RECOMMENDED MOUNTING PRESSURE Kg/cm ²	5 - 15	5 - 15	5 - 15	5 - 15	5 - 15

THERMAFLEX TUBE

Thermaflex Tube has been developed to meet the stringent VDE specification for insulation and is based on the above THER-05 material performance. Clip or clamp mounted plastic power packages will meet much higher flash testing requirements than screw mounted devices but by using clip or clamp mount with Thermaflex Tube an even higher level of electrical isolation is achieved while still maintaining a good thermal performance.

The semiconductor is simply inserted into the Thermaflex Tube which provides an all-round shroud. The tubes flexible wall accommodates

most standard packages and retains the device ready for assembly.

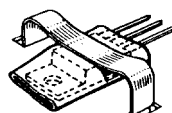
Clip type TSC903 is suitable for use with Thermaflex Tube and will accommodate heat sink panel thickness of up to 1.6mm for TO-3P etc and 2mm for TO-220. See Transistor Spring Clips.

Small (TO-220)

A = 10mm B = 25mm

Large (TO-218, TO-3P, TO-247)

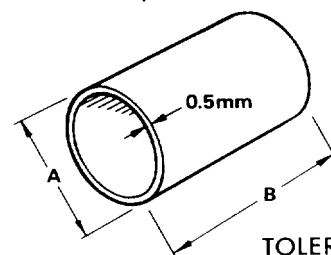
A = 13mm B = 30mm



ORDERING PROCEDURE

THER-T-SMALL
THER-T-LARGE

Other sizes can be produced to customer specification.



TOLERANCES:
LENGTH ±1.5mm
WIDTH ±0.5mm