

## Standard Films: Keratherm Brown



Keratherm<sup>®</sup> Brown with its very good thermal properties is an excellent choice for cost-effective solutions.

### APPLICATIONS

- Automotives
- Audio and video components
- White Goods
- Power Converters (AC-DC, DC-DC)
- Engine controllers
- LCD Displays

DISCLAIMER: Purchaser shall be solely responsible for determining the adequacy of the product for any and all uses which the purchaser shall apply the product, and the application of the product by the purchaser shall not be subject to any implied warranty of fitness for that purpose.

Properties	symbol	unit	70/50 w/fiberglass
Color			brown
<b>Thermal Properties</b>			
Thermal Resistance	$R_{th}$	K/W	0.44
Thermal Impedance	$R_{ti}$	$^{\circ}Cmm^2/W$ $Kin^2/W$	178 0.27
Thermal Conductivity	$\lambda$	W/mK	1.4
<b>Electrical Properties</b>			
Breakdown Voltage	$U_{d;ac}$	kV	4.0
Dielectric Breakdown	$E_{d;ac}$	KV/mm	16
Volume Resistivity		$\Omega cm$	$1.0 \times 10^{13}$
Dielectric Loss Factor	$\tan \delta$	1	$7.3 \times 10^{-3}$
Dielectric Constant	$\epsilon_r$	1	3.6
<b>Mechanical Properties</b>			
Overall Thickness ( $\pm 10\%$ )		mm	0.250
Hardness		Shore A	85
Tensile Strength		N/mm <sup>2</sup>	10
Elongation		%	5
<b>Physical Properties</b>			
Application Temperature		$^{\circ}C$	-40 to +200
Density		g/cm <sup>3</sup>	2.25
Flame class		UL	94V-1

This fiberglass reinforced film along with its very smooth surface has very good thermal resistance properties with a high insulation capacity at low mounting pressures.

### Options for Keratherm Brown (Standard Film):

Type	Film Structure	Overall Thickness	Tensile Strength	Thermal Resistance	
		mm	N/mm <sup>2</sup>	K/W	Kin <sup>2</sup> /W
<b>70/60</b>	70/50 with reinforcement and adhesive coating	0.275	10	0.52	0.34

The following thicknesses are available: 0.250 mm, 0.3 mm, 0.4 mm, 0.5 mm