

Datasheet

# Keratherm<sup>®</sup> - brown standard films

**Applications:**

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



Properties	Unit	70/50 with fibre glass
Color		brown
<b>Thermal properties</b>		
Thermal resistance $R_{th}$	K/W	0.44
Thermal impedance $R_{ti}$	$^{\circ}Cmm^2/W$	178
	$Kin^2/W$	0.27
Thermal conductivity	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	cm	$1.0 \times 10^{13}$
Dielectric loss factor tan	1	$7.3 \times 10^{-3}$
Dielectric constant $\epsilon_r$	1	3.6
<b>Mechanical properties</b>		
Overall thickness (+/-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
Flameclass	UL	94V-1

Keratherm<sup>®</sup> brown with its very good thermal properties is an excellent choice for cost-effective solutions. These fibreglass reinforced films along with their very smooth surface has very good thermal resistance with a high insulation capacity at low mounting pressures.

**Options for Keratherm<sup>®</sup> -brown (standard film)**

Type	Film structure	Overall thickness mm	Tensile strength N/mm <sup>2</sup>	Thermal resistance	
				K/W	$Kin^2/W$
<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;