

TECASINT 5501 ESD light-brown - halvfabrikat

Kemisk beteckning

PI (polyimid)

Färg

Brun

Densitet

1.68 g/cm³

Fillers

glas fibrer

Huvud egenskaper

- elektriskt statisk dissipativ
- hög termisk och mekanisk kapacitet
- låg termisk expansion
- högt krypmotstånd
- motstånd mot hög energi strålning

Målindustrier

- elektronik
- halvledartechnik
- kryogenteknik
- elektroteknik
- maskinteknik
- kärn- och vakuumteknik

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet	50 mm/min	93	MPa	DIN EN ISO 527-1	(1) eU
Elasticitetsmodul (dragprov)	1 mm/min	7000	MPa	DIN EN ISO 527-1	
Brottförlängning	50 mm/min	1.5	%	DIN EN ISO 527-1	
Böjållfasthet	10 mm/min	127	MPa	DIN EN ISO 178	
Elasticitetsmodul (böjningstest)	2 mm/min	6900	MPa	DIN EN ISO 178	
Brottförlängning (böjtest)	10 mm/min	2.7	%	DIN EN ISO 178	
Kompressionsstyrka	10 mm/min	260	MPa	EN ISO 604	
tryckhållfasthet vid brott	10 mm/min	20	%	EN ISO 604	
slagstyrka (charpy)	max 7.5 J	16.1	kJ/m ²	DIN EN ISO 179-1	1)
Shore hårdhet	Shore D	93		DIN EN ISO 868	
Rockwell hårdhet	M	119		ISO 2039/2	
Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur		329	°C	DIN EN ISO 11357	(1) Found in public sources.
värmeförvrängning temperatur	1,8 MPa	347	°C	DIN 53 461	Individual testing regarding application conditions is mandatory.
Service temperatur	short-term	300	°C	-	1)
termisk expansion	23-100°C	2.6	10 ⁻⁵ K ⁻¹	DIN 53 752	2)
termisk expansion	100-150°C	2.9	10 ⁻⁵ K ⁻¹	DIN 53 752	3)
termisk expansion	50-200°C	2.9	10 ⁻⁵ K ⁻¹	DIN 53 752	4)
Specifik värme		1.04	J/(g*K)	DIN EN 821	
Värmeledningsförmåga	40°C	0.34	W/(K*m)	DIN EN 821	
Elektriska egenskaper	parameter	värde	enhet	norm	anmärkning
Specifikt ytmodstånd	23°C	10 ⁶ - 10 ⁸	Ω	DIN EN 61340-2-3	
Specifik volymr esistans	23°C	10 ⁶ - 10 ⁸	Ω*cm	DIN EN 61340-2-3	
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24 h in water, 23°C	0.63	%	DIN EN ISO 62	(1) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
Brandklassning (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)

→ TECASINT 5000 series show significant water uptake. Parts have to be pre-dried before fast heating to above 200 °C (drying process: 2 h per 3 mm wall thickness at 150 °C).

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