

DISPAL S221PM (development alloy) Al Si 40

Physical Propertiers: (at 20°C)

property	unit	Value
density	g/cm ³	2,53 ± 5%
electrical	MS/m	currently being investigated
conductivity	%IACS	currently being investigated
heat capacity	J/gK	currently being investigated

Thermal Conductivity:

Temperature (°C)	30	100	200	300	400
Value (W/mK)	-	currently being investigated			-

Coefficient of Thermal Expansion:

property	unit	Value
CTE-value 20 to 100°C	10 ⁻⁶ /K	13,5 ± 0.5
CTE-value 20 to 200°C	10 ⁻⁶ /K	14,1 ± 0.5
CTE-value 20 to 300°C	10 ⁻⁶ /K	14,8 ± 0.5

Thermal Data's:

solidus temperature = currently being investigated
liquidus temperature = currently being investigated

	Erstellt:	Geprüft:	Freigegeben:
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Mechanical Properties:

Heat Treatment condition PM: (minimum values)

property	Unit	temperature					
		20°C	100°C	150°C	200°C	250°C	300°C
tensile strength, Rm	MPa	189					
yield strength, Rp 0.2	MPa	149					
elongation, A5	%	0,5		currently being investigated			
young's modulus, E	GPa	101					
hardness	HV30	106					

All values determined are not yet statistically validated.
Available geometries upon request.