

Annex B. Material Thermal Properties

Table B.1. Surface optical properties

Surface finish	α	ϵ
Solar cells	0.91	0.89
MLI	0.035	0.14
Gold plated aluminium	0.02	0.19
Anodized aluminium	0.11	0.50

Table B.2. Bulk thermal properties

Material	Density [$\text{kg}\cdot\text{cm}^{-3}$]	Conductivity [$\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$]	Specific heat [$\text{J}\cdot\text{kg}^{-1}\cdot\text{K}^{-1}$]
Aluminium, 7075T6	2810	130	960
Battery	2310	28	900
MLI outer wall (teflon)	1410	0.002	1004
PCB	1850	20	900
Mirror	5323	64	322