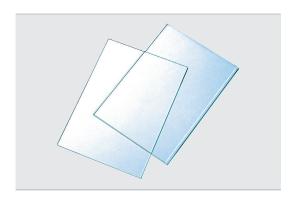


// BALZERS OPTICS

Calflex[™] 3000 SP

Heat protection filter for high temperature applications

Materion Balzers Optics' Calflex $^{\text{\tiny M}}$ 3000 SP are high performance blocking filters for IR radiation. Calflex $^{\text{\tiny M}}$ 3000 SP are produced with Optics Balzers's patented sputtering deposition technology, providing very dense coatings with excellent optical stability both at high temperature and harsh environmental conditions. Calflex $^{\text{\tiny M}}$ 3000 SP is automotive OEM qualified and does meet the ECE white requirements.



Benefits

- Automotive OEM qualified
- ECE white without long-term degradation
- Thermal stability up to 400 °C
- Environmental stability
- Narrow tolerances
- Excellent heat blocking NIR+IR
- High volume production capabilities with consistent quality

Applications

- Automotive headlights
- Medical lighting
- Entertainment lighting

Cheesecloth DIN ISO 9211-4-01

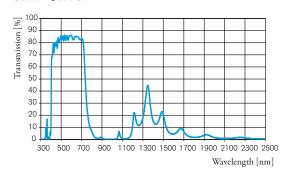
Longterm max. heat load up to 400 °C

Technical Data

Transmission		$AOI = 0^{\circ}$
Tavg > 80%	$\lambda = 425 - 680 \text{ nm}$	
Tavg < 3%	$\lambda = 800 - 1150 \text{ nm}$	
Tavg < 8%	$\lambda = 1150 - 2500 \text{ nm}$	
Size		
Any sizes, upo	on request	
Glass		
Corning XG	or equivalent	
Environment	tal Performance	
Adherence D	IN ISO 9211-4-02	

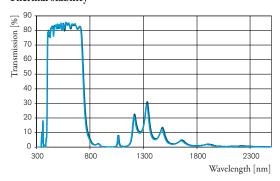
Humidity DIN ISO 9022-12-07-1 and 9022-16-07b-1

Calflex[™] 3000 SP



Spectral performance of the Calflex™ 3000 SP

Thermal stability



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