

## Understanding key terms

- **TSER — Total Solar Energy Rejection**  
The percentage of total solar energy rejected by filmed glass. The higher this value, the less solar heat is transmitted.
- **VLT — Visible Light Transmitted**  
The percentage of visible light that passes directly through filmed glass: the higher the number, the lighter the film.
- **Ultraviolet Rejection**  
The percentage of ultraviolet (UV) light that is rejected by the filmed glass. UV light contributes to the fading and deterioration of fabrics and leather.
- **IRER — Infrared Energy Rejection**  
The percent of solar infrared energy rejection over the wavelength range from 780–2,500 nm. IRER takes into account the transmitted and absorbed IR energy that will be reradiated into a car. Infrared rays are primarily responsible for the heat you feel when driving.
- **IRR — Infrared Rejection**  
The percentage of solar infrared energy rejection over the wavelength range from 900–1,000 nm.
- **Glare Reduction**  
The percentage by which visible light is reduced by the addition of film.

## Pick the film that suits your needs

Here's a comparison of the solar properties of each film on 6mm clear glass<sup>1</sup>

Product Specs Comparison	3M™ Automotive Window Films Crystalline Series	3M™ Automotive Window Films Ceramic IR Series	3M™ Automotive Window Film XP Series
Heat Rejection	Up to 63% (TSER) and Up to 71% (IRER) and Up to 99% (IRR <sup>2</sup> )	Up to 63% (TSER) and Up to 63% (IRER) and Up to 95% (IRR <sup>2</sup> )	Up to 55% (TSER) and Up to 49% (IRER) and Up to 38% (IRR <sup>2</sup> )
UV Protection	Up to 99.9%	Up to 99.9%	Up to 99.9%
Light Visibility Visible Light Transmittance (VLT)	Very High 21% - 86%	High 6% - 78%	High 5% - 79%
Glare Reduction	Up to 76%	Up to 93%	Up to 95%
Privacy and Security	Available in a range of tint shades	Available in a range of tint shades	Available in a range of tint shades
No Signal Interference	✓	✓	✓
Skin Cancer Foundation's Seal of Recommendation	✓	✓	
3M Warranty Coverage	✓	✓	✓
Cost	\$\$\$	\$\$	\$

<sup>1</sup>Data is comparable to current auto industry method using a clear 89% VLT glass, and testing is in accordance to ANSI/NFRC 200 Procedure.

<sup>2</sup>Measurement is made on film with liner alone (i.e. no glass).

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