CARBONFEATHER

Light shielding films for optical and lighting applications

Overview

Carbonfeather is designed to block unwanted light and can prevent reflections inside optical assemblies. The thin and light material is efficient in blocking light and offers a high level of reliability and longevity.

Carbonfeather is used to build assemblies for optical and lighting equipment such as photo and video cameras, photocopiers, light assemblies and components for medical and laser applications. The mechanical properties allow it to be used for moving parts, such as shutters and irises, where the low thermal expansion ensures proper operation even under harsh conditions. Our film uses coatings to achieve high optical density with good electrical resistance, while offering low mechanical friction.

This document lists our most popular products; other types and material thicknesses are available on request.

Products

CARBONFEATHER **X1B**	CARBONFEATHER **X1BST**	CARBONFEATHER **X2B**	CARBONFEATHER **X4LGB**

Applications

CARBONFEATHER **X1B**	CARBONFEATHER **X1BST**	CARBONFEATHER **X2B**	CARBONFEATHER **X4LGB**
Light shielding	***Light shielding***	***Light shielding***	***Light shielding***
- Lens assembly - Lens spacers - Lamp fixtures - LED assemblies - Light boxes - Laser scanners - Photocopiers	- Lens assembly - Lens spacers	- Shutter blades - Diaphragm - Lens spacers - Lamp fixtures - LED assemblies	- Lens assembly - Lens spacers - Lamp fixtures - LED assemblies

Features

CARBONFEATHER **X1B**	CARBONFEATHER **X1BST**	CARBONFEATHER **X2B**	CARBONFEATHER **X4LGB**
Double sided absorption layer	***Double sided absorption layer***	***Double sided absorption layer***	***Double sided absorption layer***
Standard layer	Reduced thickness	Optimized friction for moving parts	Optimized surface, reduced reflection

Structure

Specifications

	CARBONFEATHER **X1B**	CARBONFEATHER **X1BST**	CARBONFEATHER **X2B**	CARBONFEATHER **X4LGB**
PET base film	50 Micron	25 Micron	75 Micron	25 Micron
Total thickness	68 Micron	35 Micron	105 Micron	37 Micron
Surface gloss	3.0%	4.0%	2.0%	0.4%
Optical density	6	4.8	6	6
Roughness µm	0.7µm	0.7µm	1.3µm	0.8µm
Resistance Ω/□	10^4	10^4	10^4	10^4
Dynamic friction	0.21	0.19	0.22	0.44
Static friction	0.28	0.32	0.27	0.49

Shown values represent measurements on specific samples

All technical data is subject to change

KIMOTO
http://www.kimoto.ch

KIMOTO Ltd.
Leutschenbachstrasse 95
CH-8050 Zürich, Schweiz
TEL: +41 44 817 99 99 FAX: +41 44 817 99 88

KIMOTO Co., Ltd.
1-5, Yoyogi 2-Chome, Shibuya-ku, Tokyo 151-0053, Japan
TEL: +81 (0)3-6758-0300 FAX: +81 (0)3-5480-8121