20.0MM FROSTED WIDE TIR

Status	Production
Part no.	10140
Drawing no.	60460
Product type	Assembly
Туре	TIR
Pieces	1
Diameter	20.0
Height	9.90
Beam	Frosted Wide
Flange	Yes
Files	Customer drawing (PDF) Customer 3D model (.igs)



LEDs & Performances	Eff.	FWHM	Cd/Im	Spot	Cross-section	Files
Cree XP-G XLamp® White	79.1%	31.1	2.6			10140[R2]_cree_xpg_white_250408.ies
Cree MX-6 XLamp® White	79.1%	35.7	2.2			10140[R2]_cree_MX6_white_250408.ies
SSC Z1 White	76.4%	43.4	1.4			10140_Seoul_Z1_white_250408.ies
Osram Plus W5AM Dragon Cool White	78.9%	36.5	1.9			10140_Osram_Dragon_PLus_CoolWhite_250408.ldt 10140_Osram_Dragon_PLus_CoolWhite_250408.ies
SSC P4 Cool White	82.0%	31.8	2.5			10140_Seoul_P4_Cool_White_2504088.ies
Osram SSL 80 degree Oslon Ultra White	78.5%	31	2.7			10140_Oslon_wht_250408.ldt 10140_Oslon_wht_250408.ies
Nichia NCSL 119-H3 Top Emitting Warm White	81.4%	29.7	3.1			10140_Nichia_119_WarmWhite_250408.ies
SSC Z5 Cool White	80.8%	26.4	3.3			10140[R2]_Seoul_Z5_white_250408.ies
LedEngin 3W White	76.9%	38.6	1.7		A78.	10140_LedEngin_3W_white_250408.ies
LedEngin 5W White	77.3%	38.1	1.7		ATR.	10140_LedEngin_5W_white_250408.ies

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Luminus Devices SST-50 White	75.0%	48.9	1.1	LINL -	10140_Luminus_SST50_White_250408.ies
Everlight Shuen Warm White	78.7%	32.4	2.5		10140_Shuen_wwht_250408.ies
Everlight Shuen Cool White	81.2%	34.4	2.2		10140_Shuen_cwht_250408.ies
Avago Jade Cool White	82.2%	31.5	2.5		10140_Avago_Jade_cool white_250408.IES
Lumileds C Luxeon Cool White	79.5%	27.2	3.2		10140_Luxeon C_white_250408.ies
SSC P4 Version 7 Cool White	78.3%	38.5	1.8		10140_Seoul_New_P4_Pure_White_250408.ies
Cree XM-L XLamp® White	78.3%	33.5	2.3		10140_Cree_XM-L_white_31-01-11.ies
Cree XM-L - EZW Warm White	80.3%	47.3	1.4		10140_Cree_XM-L - EZW_warm white_200511.ies
Cree XP-C White	80.9%	24.6	3.7		10140_Cree_XP-C_white_270611.ies
Osram SSL 150 degree Oslon Neutral White	82.9%	22.9	4.5		10140_Oslon 150_neutral white_280711.ies
SSC Z5P pure white	%	26.9	3.5		10140_Z5P_pure white_210911.ies
Cree XB-D XLamp® Warm White	%	28.3	3.6		10140_CREE XBD_160212.ies
Cree XT-E XLamp® Cool White	%	30.1	5.8		10140_CREE XTE_160212.ies
SSC Z5M Warm White	%	32.8	2.7		10140_SeoulZ5M_warm white_250612.ies

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Related Holders & LEDs	Avag Jade Cool White	ICree MX-6 XLan eWhite	Cree XB-D XLar Warr Warr Whit	Cree XM-L np® nEZW nWarn eWhite	Cree XM-L XLar nWhit	Cree - XP-C npg-C npg-C whit e	Cree XP-G XLan White	Cree XT-E XLan Cool White	Ever Shue Cool White	li ghe r erShue Warr eWhit	ight EedE n ₃ W white	inlogicalE 5W eWhite	Lum Ingûn Luxe eCool Whit	ileds Devi SST- Whit	Nich In US In US In US In US Cos So So Emit Emit Warr White	Hosra Blus W5A Drag tingol Whit Whit	Usra SSL 150 Megre Osloi Neuti White	novsra SSL 80 edegro nOslo ablitra eWhite	m SSC P4 Cool Whit	SSC P4 Versi 7 eCool White	SSC 21 Whit	SSC Z5 Cool White	SSC Z5M Warr eWhite	SSC Z5P npure ewhit
10148 20.0mm Circular Black																\checkmark								
10148-TS 20.0mm Self Adhesive (TS) Black																\checkmark								
10149 20.0mm Circular Clear																\checkmark								
10149-TS 20.0mm Self Adhesive (TS) Clear																\checkmark								
10150 20.0mm Circular White																\checkmark								
10150-TS 20.0mm Self Adhesive (TS) White																\checkmark								
10273 50.0mm Triple White																			\checkmark	\checkmark				
10276 50.0mm Triple White																\checkmark		_	-					
10283 50.0mm Triple White																			\checkmark	\checkmark				
10286 50.0mm Triple White																\checkmark			-	-				
10293 50.0mm Triple Black																-		_	\checkmark	\checkmark				
10296 50.0mm Triple Black																\checkmark			•	-				
10303 50.0mm Triple Black																•			\checkmark	\checkmark				
10306 50.0mm Circular Black																\checkmark			•	-				
10363 20.0mm Circular Black																•			\checkmark	\checkmark				
10363-TS 20.0mm Self Adhesive (TS) Black																			√	√				
10364 20.0mm Circular White																			\checkmark	\checkmark				
10364-TS 20.0mm Self Adhesive (TS) White																			\checkmark	\checkmark				
10365 20.0mm Circular Clear																			\checkmark	\checkmark				
10365-TS 20.0mm Self Adhesive (TS) Clear																			\checkmark	\checkmark				
10630 20.0mm Universal White																						\checkmark		
10631 20.0mm Universal White	\checkmark										\checkmark				\checkmark									
10632 20.0mm Universal White						\checkmark			\checkmark	\checkmark			\checkmark				\checkmark	\checkmark						\checkmark
10634 20.0mm Universal White							\checkmark																	
10637 20.0mm Universal White		\checkmark																						
10650 20.0mm Universal White																						\checkmark		
10651 20.0mm Universal White	\checkmark										\checkmark				\checkmark									
10652 20.0mm Universal White						\checkmark			\checkmark	\checkmark			\checkmark				\checkmark	\checkmark						\checkmark
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10670 20.0mm Universal White																						\checkmark		
10671 20.0mm Universal White	\checkmark										\checkmark				\checkmark									
10672 20.0mm Universal White						\checkmark			\checkmark	\checkmark			\checkmark				\checkmark	\checkmark						\checkmark
10674 20.0mm Universal White							\checkmark																\checkmark	
10677 20.0mm Universal White		\checkmark																						

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10690 20.0mm Universal Black																	\checkmark		
10691 20.0mm Universal Black	\checkmark									\checkmark		\checkmark							
10692 20.0mm Universal Black					\checkmark			\checkmark	\checkmark		\checkmark		\checkmark	✓	'				\checkmark
10694 20.0mm Universal Black						\checkmark													
10697 20.0mm Universal Black		\checkmark																	
10710 20.0mm Universal Black																	\checkmark		
10711 20.0mm Universal Black	\checkmark									\checkmark		\checkmark							
10712 20.0mm Universal Black					\checkmark			\checkmark	\checkmark		\checkmark		√	✓	'				\checkmark
10714 20.0mm Universal Black						\checkmark													
10717 20.0mm Universal Black		\checkmark																	
10730 20.0mm Universal Black																	\checkmark		
10731 20.0mm Universal Black	\checkmark									\checkmark		\checkmark							
10732 20.0mm Universal Black			\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark		~	Í 🗸	'				\checkmark
10733 20.0mm Universal Black			\checkmark	\checkmark			\checkmark												
10734 20.0mm Universal Black						\checkmark												\checkmark	
10737 20.0mm Universal Black		\checkmark																	
47.313.5001.80 with 47.313320.80 20.0mm BJB® Black															\checkmark	\checkmark			

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General Instruction - Optics & Holders

Handling instructions

- Do not handle or install lenses without wearing gloves, skin oils may damage the lens or the light transmission.
- Clean lenses with a mild soap and water and dry with a clean soft cloth.
- Do not use any commercial solvents on lenses.
- Mount holders with low Odour epoxies and allow time for them to out gas to stop lenses fogging.

Disclaimer - Optics & Holders

Please note that flow lines, weld lines, surface scratches and small black or white inclusions within the lenses are acceptable if the optical performance of the lens is within the specification described below:

For optics that have FWHMs of 20 degrees or less, the general tolerance is +/-2 degrees OR the tolerances stated below - whichever is the greater.

For all optics except Rippled and Frosted;

• FWHM = Datasheet Value +/-10%.

For all Rippled and Frosted Optics;

• FWHM = Datasheet Value +/-20%

For all Optics;

• Efficiency = Datasheet Value +infinity / -10%

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such is not covered by Carclo's warranty.

General Instruction - Taped Holders

Click here to view the 3M Technical Data Sheet

- When assembling the pre-taped holder onto the mating surface, the application must be made straight and square, so that the tape bonds consistently with mating surface. Assembly at an angle might cause an imperfect bond to the mating surface.
 Remember to ascertain the compatibility of the different substrates with the tape, as humidity and temperature fluctuations will weaken it's
- Remember to ascertain the compatibility of the different substrates with the tape, as humidity and temperature fluctuations will weaken it's adhesive.
- To obtain optimum adhesion, the bonding surfaces must be clean, dry, free from grease and dirt and must be well unified.
- Some typical surface cleaning solvents are isopropyl alcohol or heptane.
- * If cleaning of PCB or LED surfaces is required, please follow strictly the cleaning instructions recommended by your PCB and/or LED
 manufacturer this is important to note, as cleaning in some circumstances can damage LEDs or other electronic components on the PCB.
 Please also note that optical components should not be cleaned using any chemicals only a micro fibre cloth should be used to remove
 fingerprints or other traces from handling.
- * Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. These cleaning recommendations may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure and moderate heat, from 100°F (38°C) to 130°F (54°C), will assist the adhesive in developing intimate contact with the bonding surface.

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

During assembly the optic when placed on the PCB should be firmly held for 1-5 seconds to ensure the best possible bond. The tape will reach its final strength in 72 hours, dependent on the material and ambient conditions.

We request that the customer ensures (and fully tests) the suitability and sufficiency of the bond in his product. For example, mechanical stress, vibration and holes on the surface of the circuit board can weaken the strength of the tape.

Disclaimer - Taped Holders

Shelf Life - There is 1 year expected shelf life from the date of purchase direct from Carclo.

All Carclo lenses supplied with tape use the same high strength double-coated tape (unless otherwise mentioned in the datasheet). This tape is specifically selected for this application.

These tapes generally work well together with PCBs and LEDs on the market. The customer must take the necessary measures to ensure complete compatibility with their particular application, product, PCB, LED and/or other components. **Testing and verifying of the adhesives and their combinations is the responsibility of the customer.**

The customer is solely responsible for evaluating the application of double sided tape to Carclo Holders and the adhesion of double sided tape holders to determine whether such double-sided tape is fit for a particular purpose and suitable for the users method of application. The selection of double-sided tape in the adhesion of double sided tape holders is not covered by Carclo's warranty.

Carclo cannot take responsibility for the results obtained by others whose methods we cannot control. It is always the customer's responsibility to determine the adhesive's suitability for their product and to take precautions for protection of property and persons against any hazards that may be involved in the handling and use of adhesives. Carclo disclaims all warranties, including warranties of merchantability or suitability for a particular purpose, arising from use of any adhesive product. Carclo disclaims any liability for consequential or incidental damages of any kind, including lost profits.

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