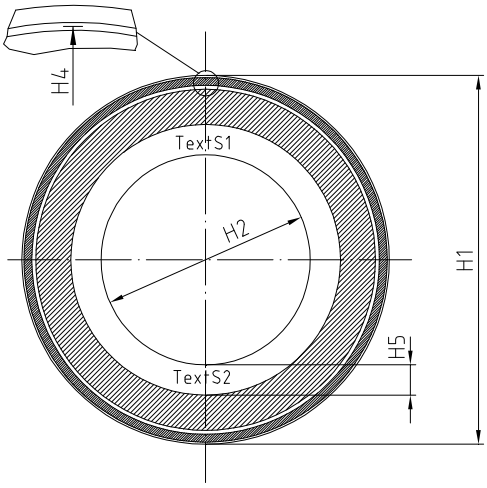
LSHC10S 33-1024N, LSHC10R

iC-LSHC Encoder Disc and Reticle

CODE DISC ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	LSHC10S 33-1024N	Nonius Code Disc 1024 PPR, dia 33 mm

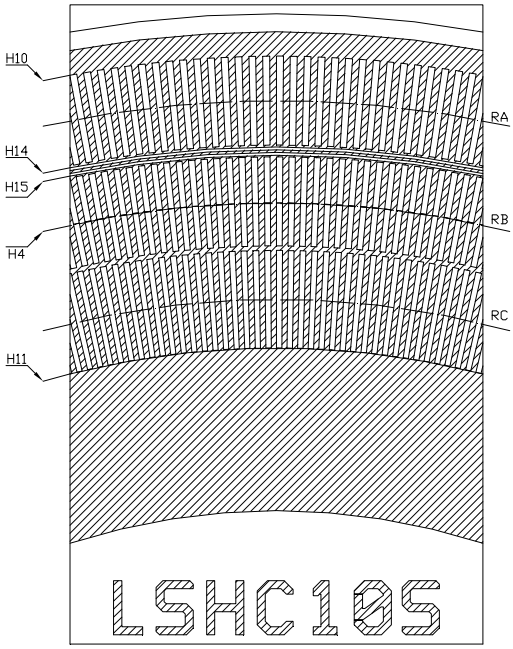
PHYSICAL DIMENSIONS



Design Example

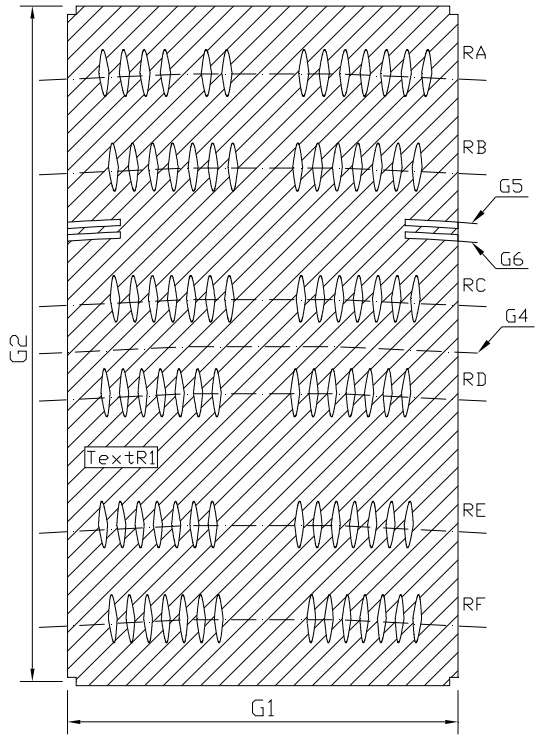
Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		33.0	± 100 µm
H2	Inner Diameter		18.0	+ 200 µm
H3	Thickness		1	± 100 µm
H4	Radius of Chip Center	referred to origin	14.5	
H5	Distance Pattern to Drill Hole		2.3	
H6	Code Track Eccentricity	referred to center of inner hole	± 0.2	
H7	TextS1	readable on side of pattern	LSHC10S	
H8	TextS2	readable on side of pattern	33-1024	

TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	14.500
H10	Code Pattern Radius	end	16.125
H11	Code Pattern Radius	begin	12.895
H12	Recommended LED Spot Diameter	LED Spot	> 3.2
H13	Recommended LED Spot Center	radius as center of illumination	14.500
H14	Alignment Circle	end of circle	15.120
H15	Alignment Circle	begin of circle	15.030
RA	Track Radius	RA	15.805
RB	Track Radius	RB	15.355
RC	Track Radius	RC	14.725
RD	Track Radius	RD	14.275
RE	Track Radius	RE	13.645
RF	Track Radius	RF	13.195

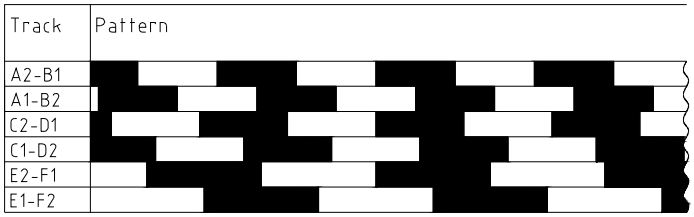
PHYSICAL DIMENSIONS: Reticle



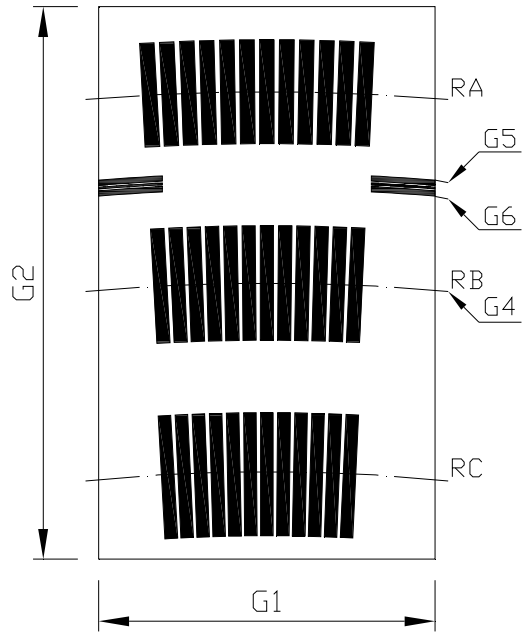
Item	Parameter	Comments	[mm]	Tolerance
G1	Width		1.90	
G2	Height		3.30	
G3	Thickness		0.50	± 10%
G4	Radius of Chip Center	referred to origin	14.500	
G5	Alignment Circle	end of circle	15.120	
G6	Alignment Circle	begin of circle	15.030	
G7	TextR1	readable on side of pattern	LSHC10R	
RA	Track Radius Nonius	RA	15.805	
RB	Radius Track Nonius	RB	15.355	
RC	Track Radius Master	RC	14.725	
RD	Track Radius Master	RD	14.275	
RE	Track Radius Segment	RE	13.645	
RF	Track Radius Segment	RF	13.195	

TRACK ASSIGNMENT: Reticle

Output	Signal	Signal	Output
A1	1023 PPR PSINN	1023 PPR PCOSN	A2
B1	1023 PPR NCOSN	1023 PPR NSINN	B2
C1	1024 PPR PSINM	1024 PPR PCOSM	C2
D1	1024 PPR NCOSM	1024 PPR NSINM	D2
E1	992 PPR PSINS	992 PPR PCOSS	E2
F1	992 PPR NCOSS	992 PPR NSINS	F2



PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name and Design Release	iC-PN3324	
G1	Window Width		1.90
G2	Window Height		3.24
G4	Radius of Chip Center	referred to origin	14.500
G5	Reflective Alignment Aid	end of circle	15.120
G6	Reflective Alignment Aid	begin of circle	15.030
RA	Track Radius Nonius		15.580
RB	Track Radius Master		14.500
RC	Track Radius Segment		13.420

TRACK ASSIGNMENT: Photosensor Array

Radius	Signal			
RA	1023 PPR PSINN	1023 PPR PCOSN	1023 PPR NSINN	1023 PPR NCOSN
RB	1024 PPR PSINM	1024 PPR PCOSM	1024 PPR NSINM	1024 PPR NCOSM
RC	992 PPR PSINS	992 PPR PCOSS	992 PPR NSINS	992 PPR NCOSS