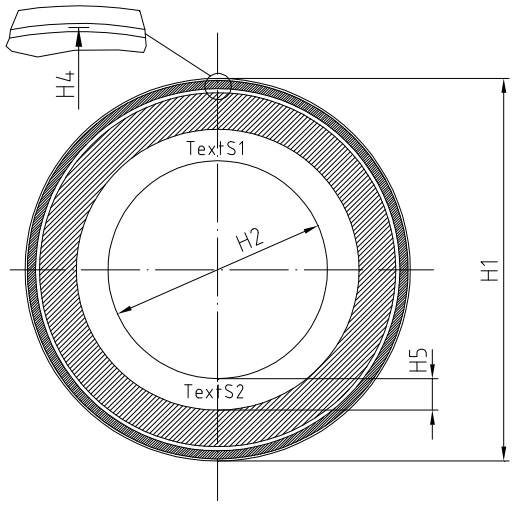
LSHB4S 42-4096, LSHB4R

iC-LSHB Encoder Disc and Reticle Description

ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	LSHB4S 42-4096	Incremental Code Disc A/B/Z 4096 PPR, dia 42 mm

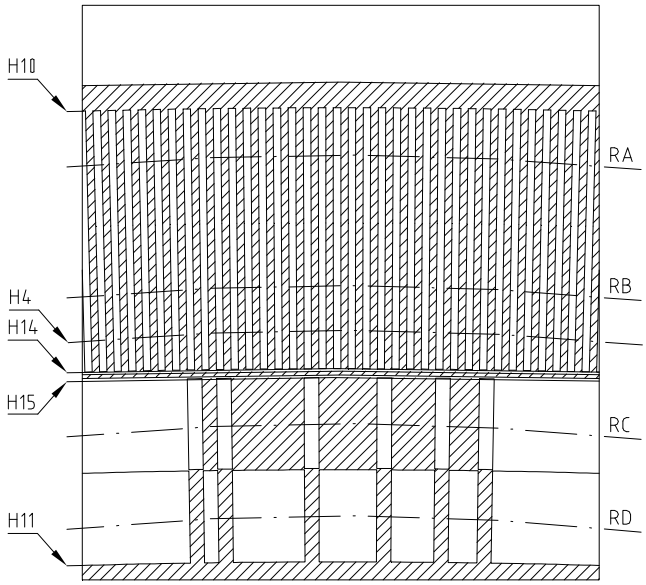
PHYSICAL DIMENSIONS



Design Example

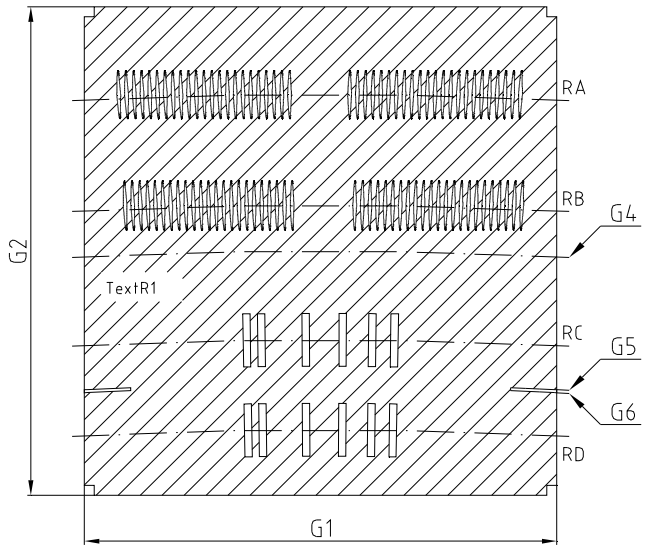
Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		42.0	± 100 µm
H2	Inner Diameter		18.0	+ 200 µm
H3	Thickness		1.0	± 100 µm
H4	Radius of Chip Center	referred to origin	19.71	
H5	Distance Pattern to Drill Hole		5.0	
H6	Code Track Eccentricity	referred to center of inner hole	± 0.2	
H7	TextS1	readable on side of pattern	LSHB4S	
H8	TextS2	readable on side of pattern	42-4096	

TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	19.71
H10	Code Pattern Radius	end	20.625
H11	Code Pattern Radius	begin	18.810
H12	Recommended LED Spot Diameter		> 3.2
H13	Recommended LED Spot Center	radius for center of illumination	19.71
H14	Alignment Circle	end of circle	19.171
H15	Alignment Circle	begin of circle	19.159
RA	Radius Track A/B		20.350
RB	Track Radius NA/NB		19.900
RC	Radius Track PZ		19.352
Rd	Radius Track NZ		18.987

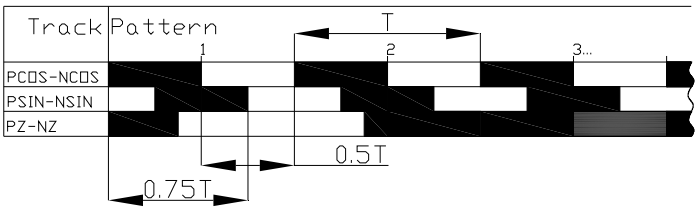
PHYSICAL DIMENSIONS: Reticle



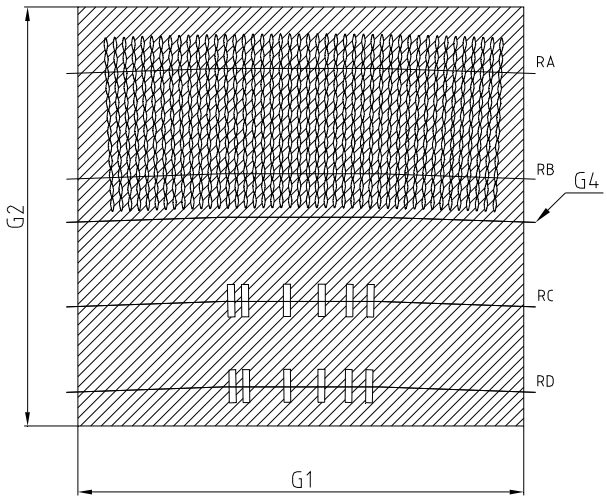
Item	Parameter	Comments	[mm]
G0	Name and Design Release	LSHB4R	
G1	Width		1.90
G2	Height		1.98
G3	Thickness		0.50 ± 10%
G4	Radius of Chip Center	referred to origin	19.71
G5	Alignment Circle	end of circle	19.171
G6	Alignment Circle	begin of circle	19.159
G7	TextR1	readable on side of pattern	LSHB4R

TRACK ASSIGNMENT: Reticle

Radius	Signal	
RA	4096 PPR PSIN	4096 PPR PCOS
RB	4096 PPR NCOS	4096 PPR NSIN
RC	1 PPR PZ	
RD	1 PPR NZ	



PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name and Design Release	iC-PA4296	
G1	Window Width		1.90
G2	Window Height		1.79
G3	Thickness		
G4	Radius of Chip Center	referred to origin	19.71
G5	Alignment Circle	end of circle	
G6	Alignment Circle	begin of circle	
G7	TextR1	readable on side of pattern	
RA	Radius Track A/B		20.35
RB	Radius Track A/B		19.90
RC	Radius Track PZ		19.352
RD	Radius Track NZ		18.987

TRACK ASSIGNMENT: Photosensor Array

Radius	Signal			
RA	4096 PPR NSIN	4096 PPR PCOS	4096 PPR PSIN	4096 PPR NCOS
RB	4096 PPR NSIN	4096 PPR PCOS	4096 PPR PSIN	4096 PPR NCOS
RC	1 PPR PZ			
RD	1 PPR NZ