

## Feature

- Low power consumption, CMOS for TTL interface
- ISO 7811 conformance
- Data processing rate: 300 ~ 15,000 bps per track
- Widely operating voltage range 3.3V~5.5V
- Reading single, dual or triple track
- Mini size 43 mm



## Specification

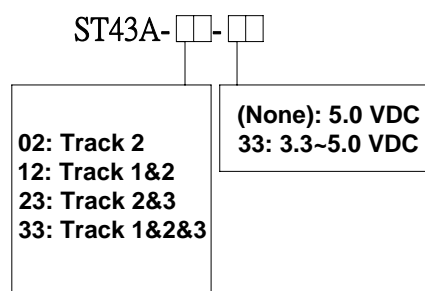
Item	Content		
	Single track	Dual track	Triple track
ST43A-XX	Single track	Dual track	Triple track
Max DC Current @ DC5V	3.5 mA	3.5 mA	5.5 mA
ST43A-XX-33	Single track	Dual track	Triple track
Max DC Current @ DC3.3V	1.5 mA	1.5 mA	3.5 mA
Card operation speed	10 ~ 180 cm/sec		
Decoding method	F/2F		
Operation temperature	-10 ~ 50°C		
Life time of head	Approx. 300,000 passes		
Card standard	ISO 7811		
Cable length	150 mm		
Dimension	43 x 22 x 23 mm		

## Guaranteed operating ranges

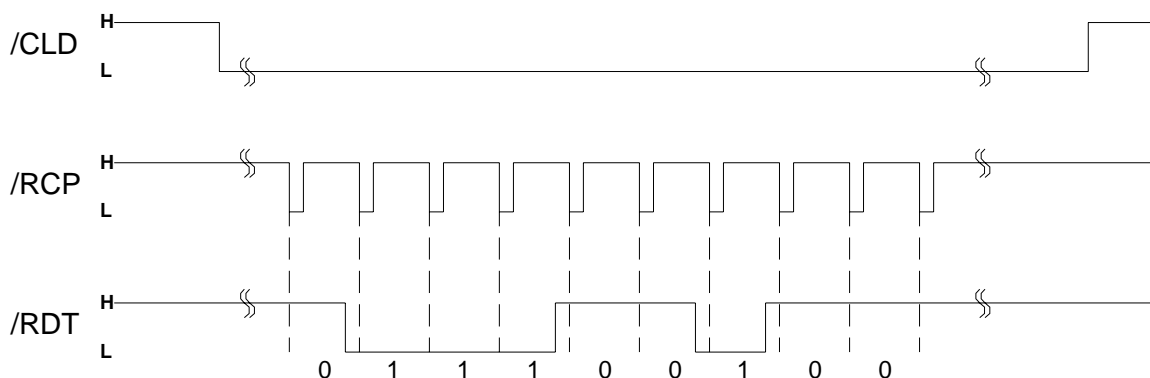
Symbol	Parameter	Min.	Typ.	Max.	Unit
V <sub>CC</sub>	Supply Voltage	3.3	—	5.5	V
I <sub>OH</sub>	Output Current-High V <sub>CC</sub> =5V, V <sub>OH</sub> =2.4V	—	—	-5	MA
I <sub>OL</sub>	Output Current-Low V <sub>CC</sub> =5V, V <sub>OL</sub> =0.4V	—	—	6	MA

TA=25°C

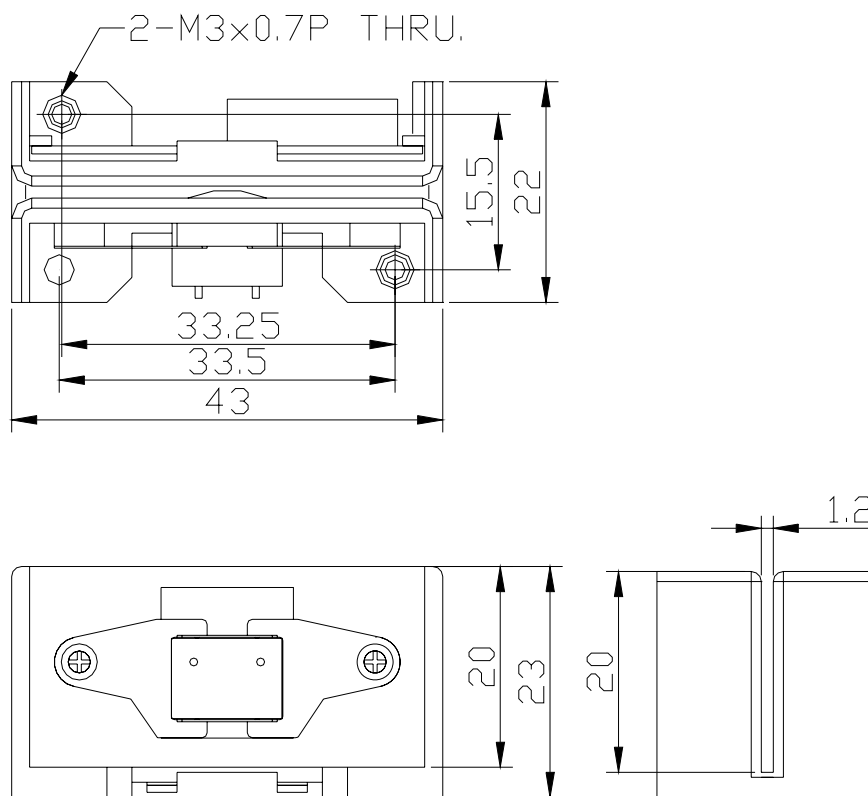
## Model description



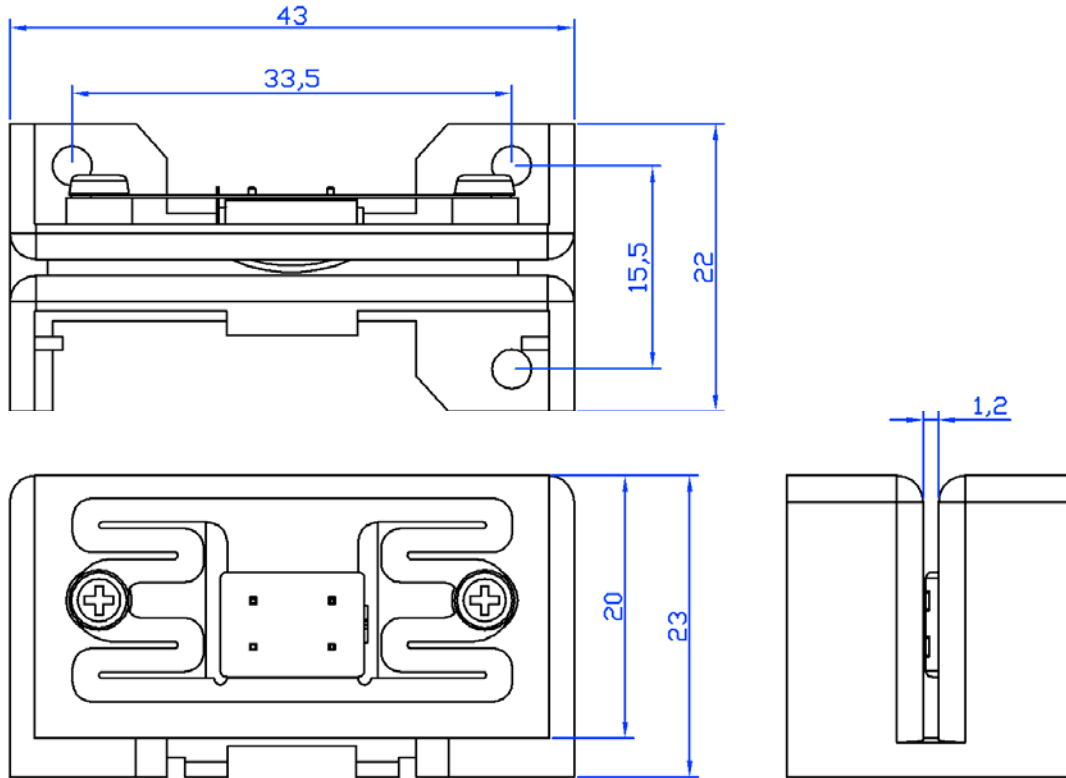
## Timing



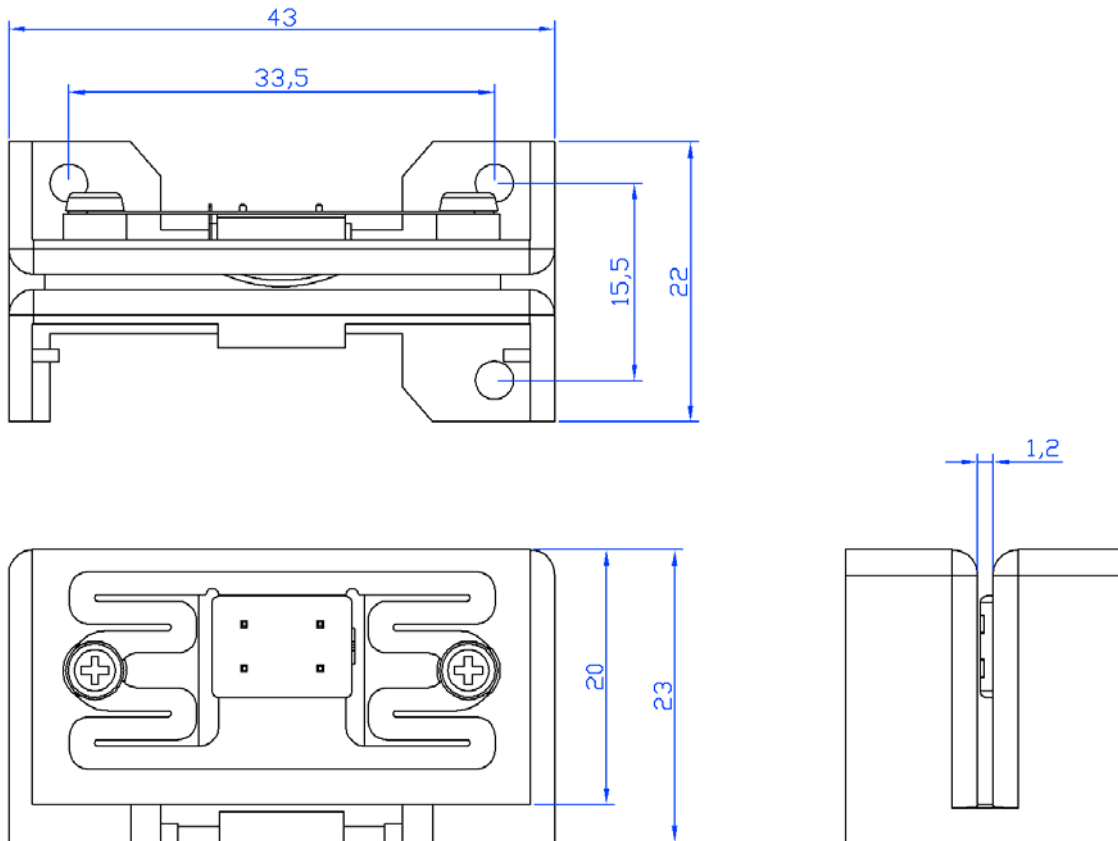
## Dimension 1: ST43A-02



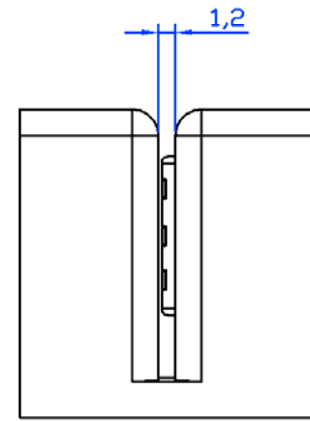
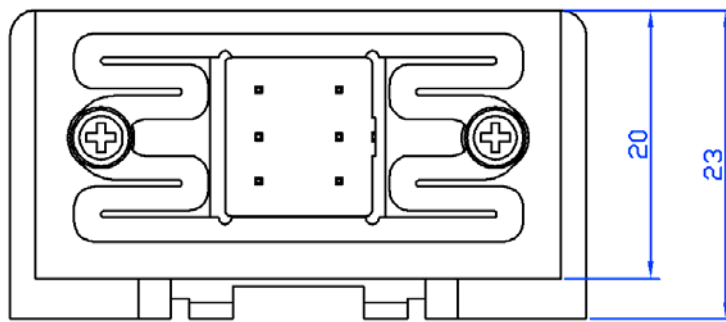
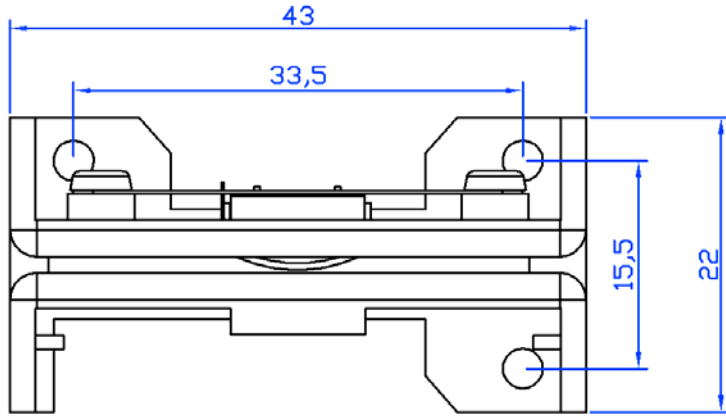
## Dimension 2: ST43A-12



## Dimension 3: ST43A-23

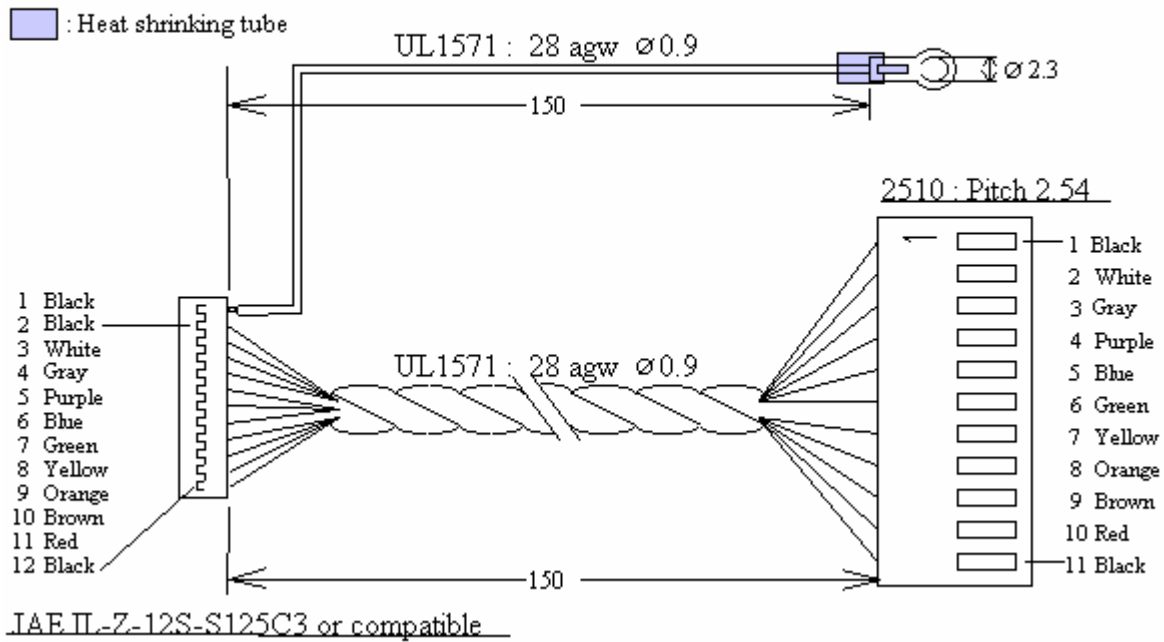


## Dimension 4: ST43A-33



## Cable Specification

ST43-33



## Cable pin assignment

Pin NO.	Signal	Wire color	Function
1	/RCP3	Black	Track 3 clock
2	/RDT3	White	Track 3 data
3	/CLD3	Gray	Card load 3
4	/RCP2	Purple	Track 2 clock
5	/RDT2	Blue	Track 2 data
6	/CLD2	Green	Card load 2
7	/RCP1	Yellow	Track 1 clock
8	/RDT1	Orange	Track 1 data
9	/CLD1	Brown	Card load 1
10	VCC	Red	DC power supply
11	GND	Black	Power ground
CG	CGND	Black	Case ground

## Recommend header type

Housing type	SMT type header	Through hole type	
		Straight header	Right angle header
JAE IL-Z-03S-S125C3	JAE IL-Z-03PL-SMTY-E1500	JAE IL-Z-03P-S125T3-E	JAE IL-Z-03P-S125L3-E
JAE IL-Z-07S-S125C3	JAE IL-Z-07PL-SMTY-E1500	JAE IL-Z-07P-S125T3-E	JAE IL-Z-07P-S125L3-E
2510-11P		2520-11P-S	2520-11P-R