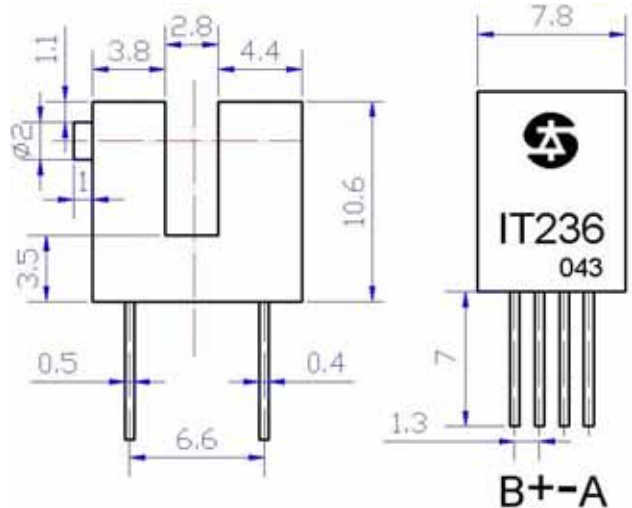


IT236

Outline Dimensions (units: mm)

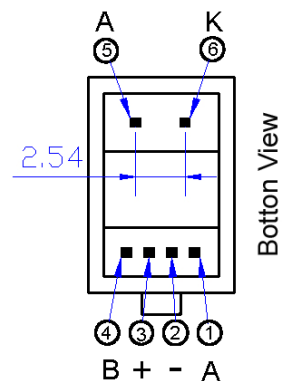
一、 Characteristics

1. Two group infrared light electric pickups.
 2. Resolution : 0.43mm.
Diffraction grating coding mask : 90-180 CPR*
Diffraction grating ruler : 60 LPI**
 3. Does not need to adjust the phase .
 4. A, B phase two group TTL level output.
 5. The max.frequency response : 20KHz .
 - 6 . Optics radius : 11-25mm .
- *CPR : Each pump over leaves pulse number .
**LPI : Each inch output pulse number .

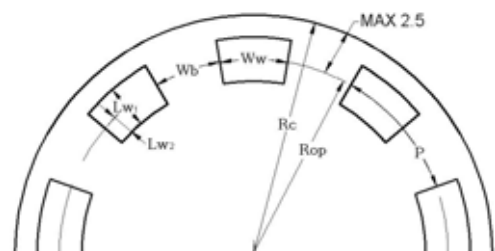
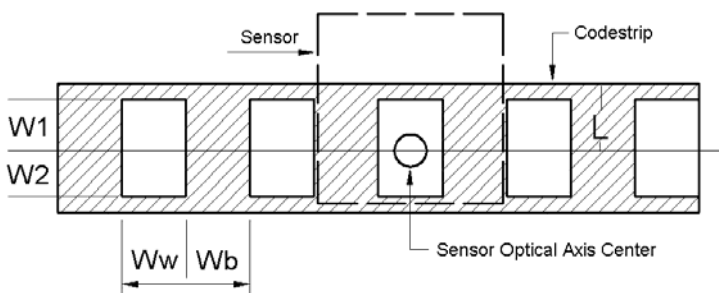


二、 Absolute Maximum Ratings (Ta=25)

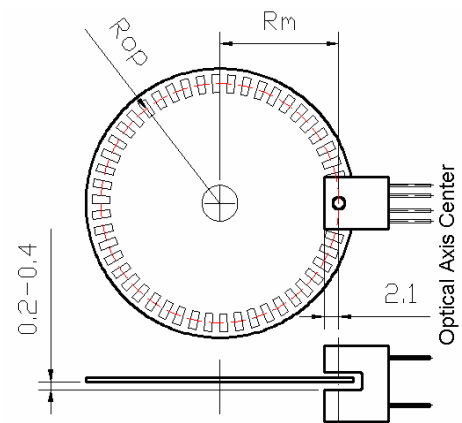
Parameter	Symbol	Min.	Max.	Units	Notes
Supply Voltage	Vcc	4.5	5.5	V	
Temperature	T	-20	65		
Output impedance	Rp	4.7		K	
Load Capacitance	Cl		100	pF	
Count Frequency	F		20	KHz	
Storage Temperature	Tstg	-40	+85		
Output Current	Io	1	5	mA	



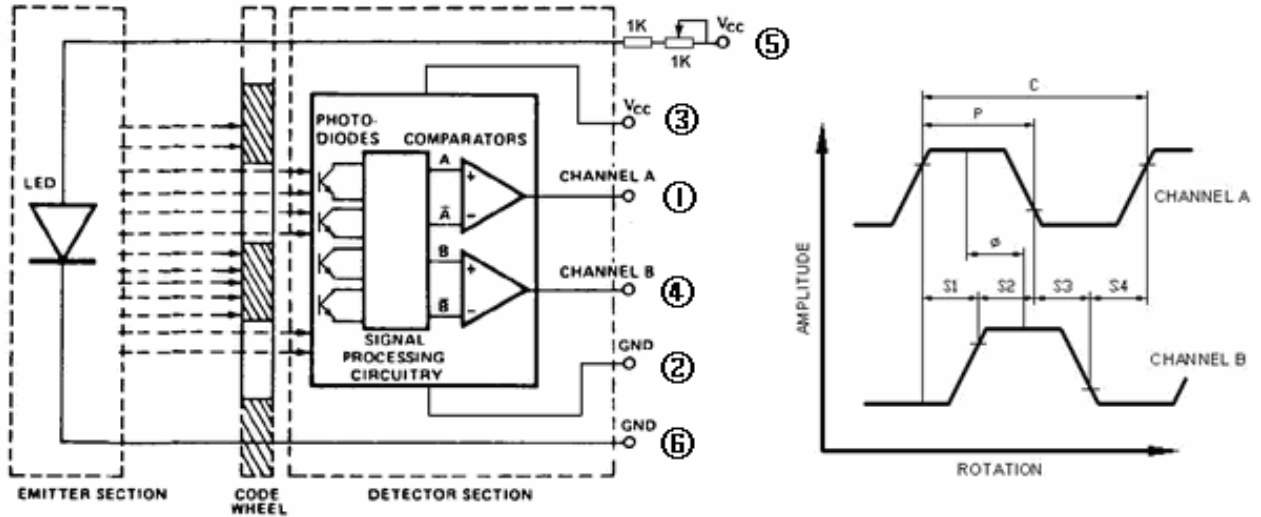
三、 Recommended Codewheel and Codestrip Characteristics



Parameter	Symbol	Min.	Max.	Units	Notes
Window/Bar Ratio	Ww/Wb	0.90	1.10		
Window Length	Lw	1.5	2	mm	
Absolute Maximum Radius(Rotary)	Rc		Rop+2.5	mm	
Center of Post to Inside Edge of Window	W1				
Center of Post to Outside Edge of Window	W2				
Center of Post to Inside Edge of Codestrip	L				



Block Diagram and Output Waveforms



四、Electrical Characteristics

($T_a=25$)

Parameter	Symbol	Typ.	Case1 Max	Case2 Max	Min.	Max.	Units	Notes
Pulse Width Error	ΔP		30	40			$^{\circ}e$	
Logic State Width Error	ΔS		30	40			$^{\circ}e$	
Phase Error	$\Delta \Phi$		10	15			$^{\circ}e$	
High Level Output Voltage(A&B)	V_{OH}				2.4		v	$V_{CC}=5V, I_{OH}=0, E_e=0$
Low Level Output Voltage (A&B)	V_{OL}					0.4	v	$V_{CC}=5V, I_{OL}=1.6mA, E_e=2.0mW/cm^2$
Rise/Fall time	t_r, t_f	100					ns	$V_{CC}=5V, R_L=1Kohm$
Propagation time Low-High,High-Low	t_{PLH}, t_{PHL}	5					μs	$V_{CC}=5V, R_L=1Kohm$