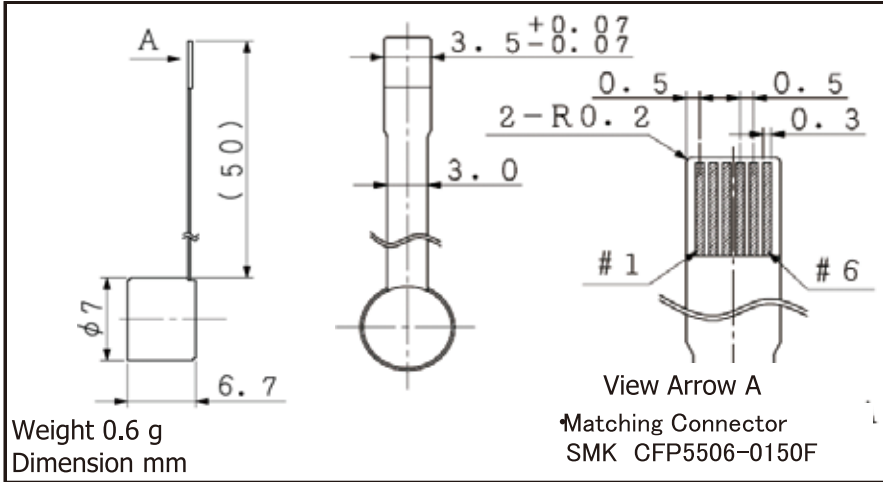
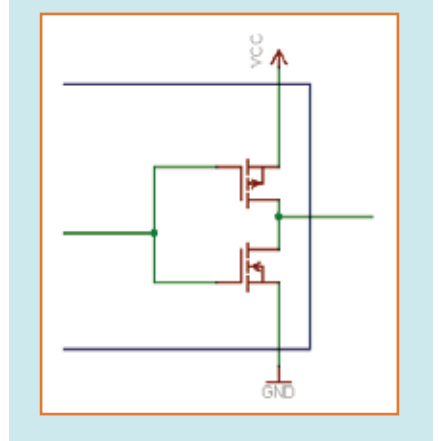


# ETD07-3B/C/D

## 3 Channel optical incremental encoder



Output circuit

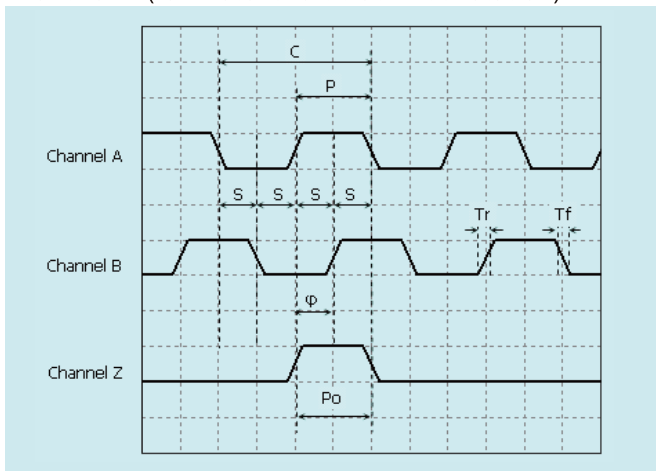


For combination with motors : SBL07, SCL07 Series

Specifications at 25 °C

	ETD07-3B	ETD07-3C	ETD07-3D	
1 Sensor	Optical			
2 Encoder Type	Incremental			
3 Output Signal	CMOS/ TTL Compatible			
4 Number of Channels	3	3	3	channel
5 Resolution (Max. speed = 50,000 rpm)	64	128	256	pulse/rev
6 Max. Frequency Response	55	110	220	kHz
7 Supply Voltage, Vcc	4.5 . . 5.5			V
8 Supply Current, typical	20			mA
9 Output Voltage "H"	≥ 2.4 (Max. Vcc)			V
10 Output Voltage "L"	≤ 0.4			V
11 Output current per channel	1.5			mA
12 Rise and fall time (R <sub>L</sub> = 2.7 kΩ and C <sub>L</sub> = 25 pF), typical	Tr = 100, Tf = 100			ns
13 Inertia	TBD			gmm <sup>2</sup>
14 Operating Temperature	-20 . . . +85			°C
15 Storage Temperature	-20 . . . +85			°C

Wave form (for motor shaft clockwise rotation)



Output signal information

Cycle C	360	° e
Pulse P	180	° e
A to B channel phase shift, φ	90±45	° e
Logic state width, S	90±45	° e
Z channel width, P0	180±45	° e

※Maximal error (± ° e) indicated above.

Electrical connections

# 1	V c c	DC4.5...5.5V
# 2	Ch.B	CMOS/TTL Compatible
# 3	Ch.A	CMOS/TTL Compatible
# 4	Ch.Z	CMOS/TTL Compatible
# 5	GND	
# 6	—	NC

V01

Specifications subject to change without notice