

**rev.** A**page** 1 of 3**date** 12/2008**PART NUMBER:** MAS10**DESCRIPTION:** absolute encoder**ELECTRICAL SPECIFICATIONS**

output code	G: gray code
current consumption	≤40 mA
frequency response	0~20 KHz
logic	Negative logic (H=0, L=1)
output circuit	Voltage output
output capacity	sink current each bit 4mA max
supply voltage	5 V ± 5%
output resolution (ppr)	256 (8 bits/rotation)

**MECHANICAL SPECIFICATIONS**

max shaft load, radial:	0.98N (100gf)
axial:	0.98N (100gf)
max rotational speed	6000 RPM
shock resistance	500 m/s <sup>2</sup> (50G), 3 times each on XYZ
vibration proof	55 Hz, double amplitude 1.5mm, 2 hours each on XYZ
weight	10g (with 300m cable)
cable	10 core vinyl wire insulated shield cable (300mm)

**ENVIRONMENTAL SPECIFICATIONS**

operating temp	0° to +60° C
storage temp	-20° to +80° C
humidity	RH 35%~90% non collecting

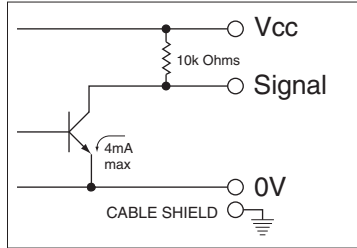
**ORDERING INSTRUCTIONS**

# MAS10-256G

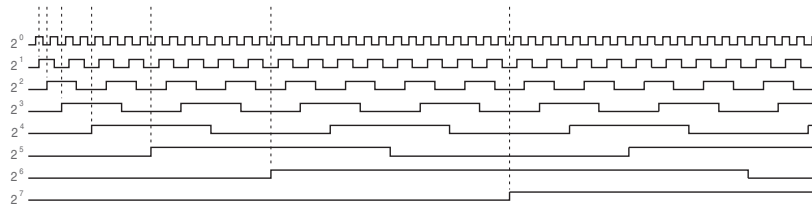
**PART NUMBER:** MAS10

**DESCRIPTION:** absolute encoder

**CIRCUIT CONNECTIONS**



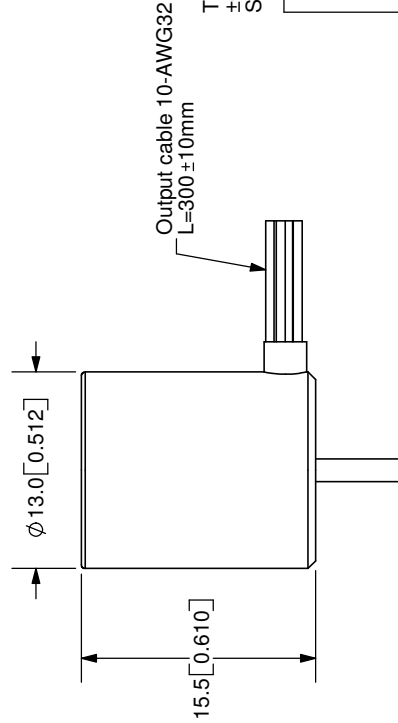
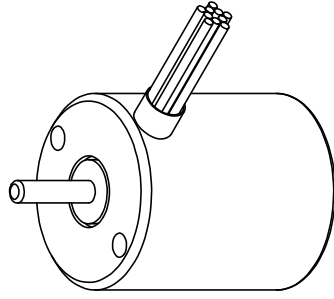
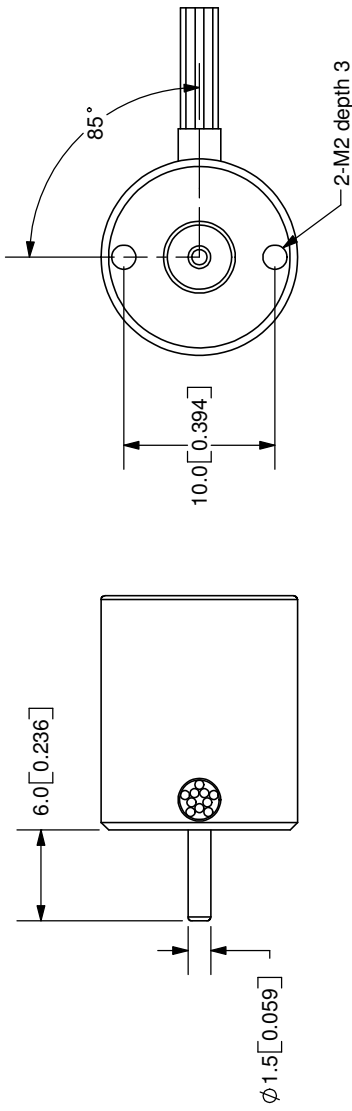
**OUTPUT WAVEFORM**



Wiring Guide

Black ~ 0V(com)	Green ~ 2 <sup>3</sup>
Red ~ 5V +/- 5%	Blue ~ 2 <sup>4</sup>
Brown ~ 2 <sup>0</sup>	Purple ~ 2 <sup>5</sup>
Orange ~ 2 <sup>1</sup>	Gray ~ 2 <sup>6</sup>
Yellow ~ 2 <sup>2</sup>	White ~ 2 <sup>7</sup>

REV.	DESCRIPTION	DATE
A	NEW DRAWING	7/30/2007



TOLERANCE:  
±0.3mm UNLESS OTHERWISE  
SPECIFIED



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TITLE: Incremental Encoder	REV: A
PART NO: MAS10	UNITS: MM [INCHES]
DRAWN BY: JMS	APPROVED BY:
	SCALE: 2:1

Cable Color	Black	Red	Brown	Orange	Yellow	Green	Blue	Purple
Output Type	0V	5V±5%	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>2</sup>	2 <sup>3</sup>	2 <sup>4</sup>	2 <sup>5</sup>
Cable Color	Gray	White	-	-	-	-	-	-
Output Type	2 <sup>6</sup>	2 <sup>7</sup>	-	-	-	-	-	-

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PC FILE NAME: MAS10