



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 ² (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

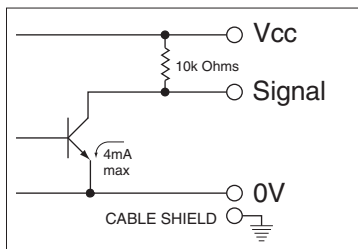
ORDERING INSTRUCTIONS

MAS10-256G

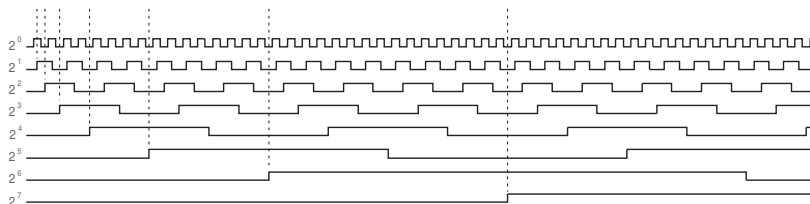
PART NUMBER: MAS10

DESCRIPTION: absolute encoder

CIRCUIT CONNECTIONS



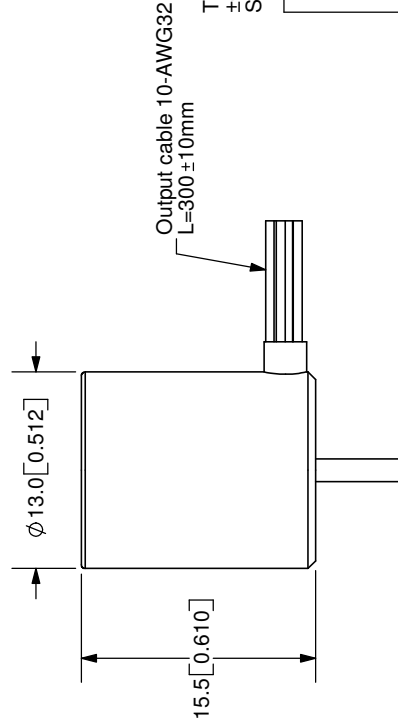
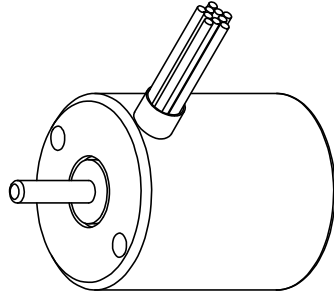
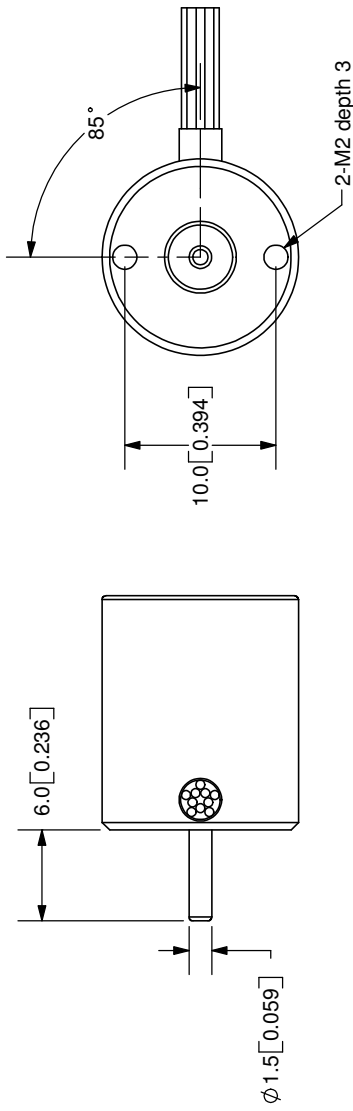
OUTPUT WAVEFORM



Wiring Guide

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

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 ⁰	2 ¹	2 ²	2 ³	2 ⁴	2 ⁵
Cable Color	Gray	White	-	-	-	-	-	-
Output Type	2 ⁶	2 ⁷	-	-	-	-	-	-

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PC FILE NAME:
MAS10