

**SERIES:** RING28 | **DESCRIPTION:** HOLLOW SHAFT MECHANICAL ENCODER**FEATURES**

- 15 mm height
- haptic detent feedback
- 30K rotational life cycles

**ELECTRICAL**

parameter	conditions/description	min	typ	max	units
power supply			5		V
current consumption				10	mA
output	2-bit quadrature, channel A leads channel B by 90° with clockwise rotation				
output resolution	15, 18 PPR				
insulation resistance	at 250 Vdc	100			MΩ
dielectric strength	for 1 minute at sea level		300		Vac
electrical travel	continuous				
contact bounce	at 15 RPM			2	ms

MECHANICAL

parameter	conditions/description	min	typ	max	units
operating speed				60	RPM
rotational angle	continuous		360		°
detent step angle	30 detent models 18 detent models		12 20		°
rotational torque		50		250	gf·cm
rotational life			30,000		cycles

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		-30		80	°C
storage temperature		-40		85	°C
RoHS	yes				
IP level	IP40				

SOLDERABILITY

parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 3 seconds		300		°C
wave soldering	for maximum 3 seconds		260		°C

PART NUMBER KEY

RING28 - 16 XXXX - TH

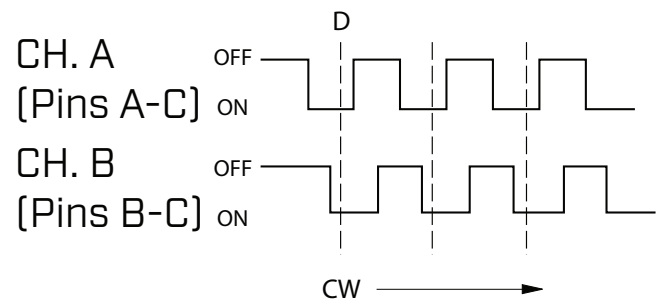
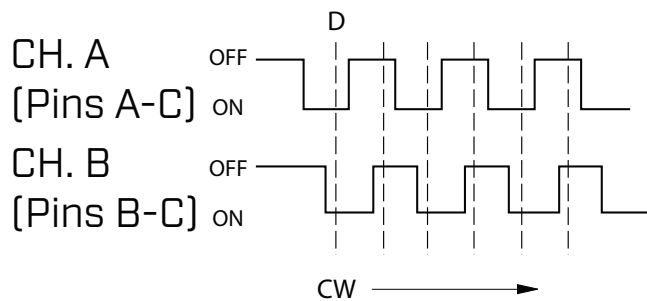
Base Number

Resolution, Detent:
1530 = 15 PPR, 30 detents
1818 = 18 PPR, 18 detents

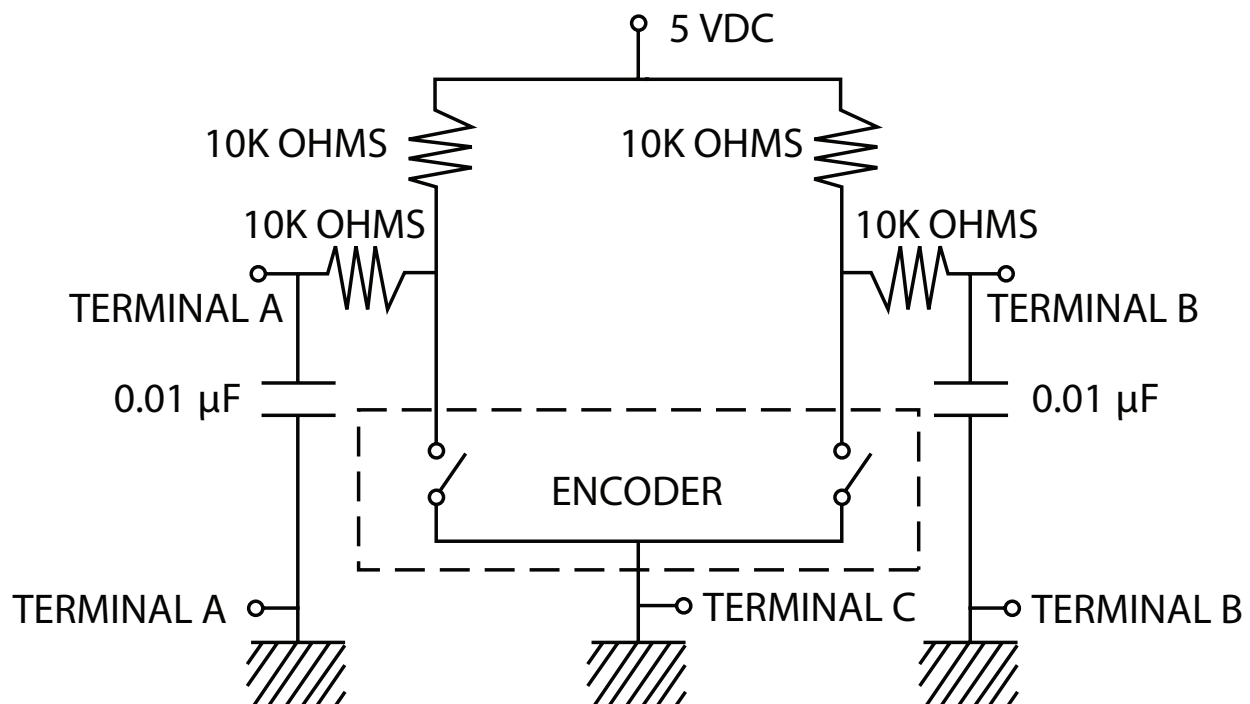
OUTPUT WAVEFORM

15 PPR, 30 Detent Model

18 PPR, 18 Detent Model



RECOMMENDED FILTER



REVISION HISTORY

rev.	description	date
1.0	initial release	12/16/2024

The revision history provided is for informational purposes only and is believed to be accurate.



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