



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

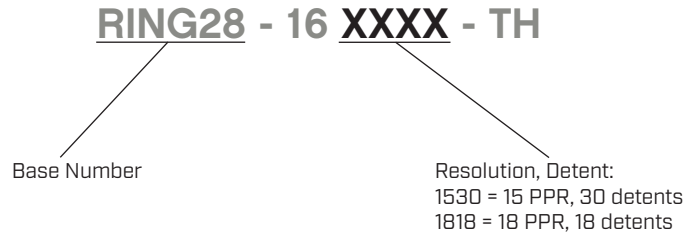
ENVIRONMENTAL

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

SOLDERABILITY

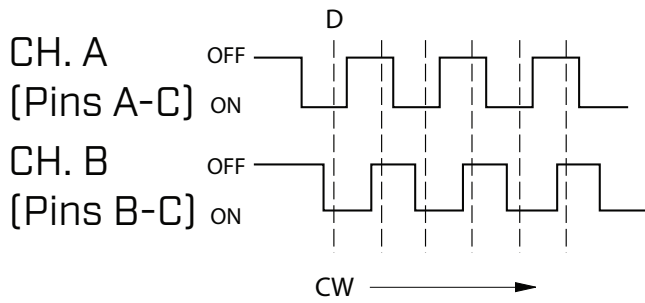
parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 3 seconds		300		°C
wave soldering	for maximum 3 seconds		260		°C

PART NUMBER KEY

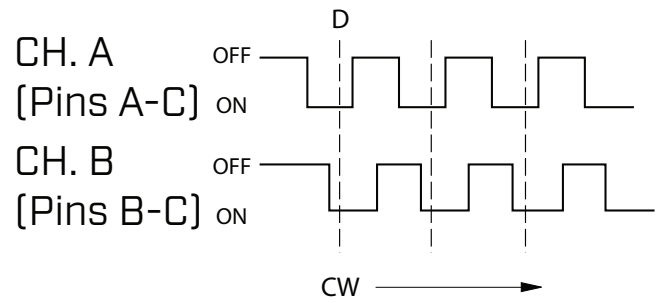


OUTPUT WAVEFORM

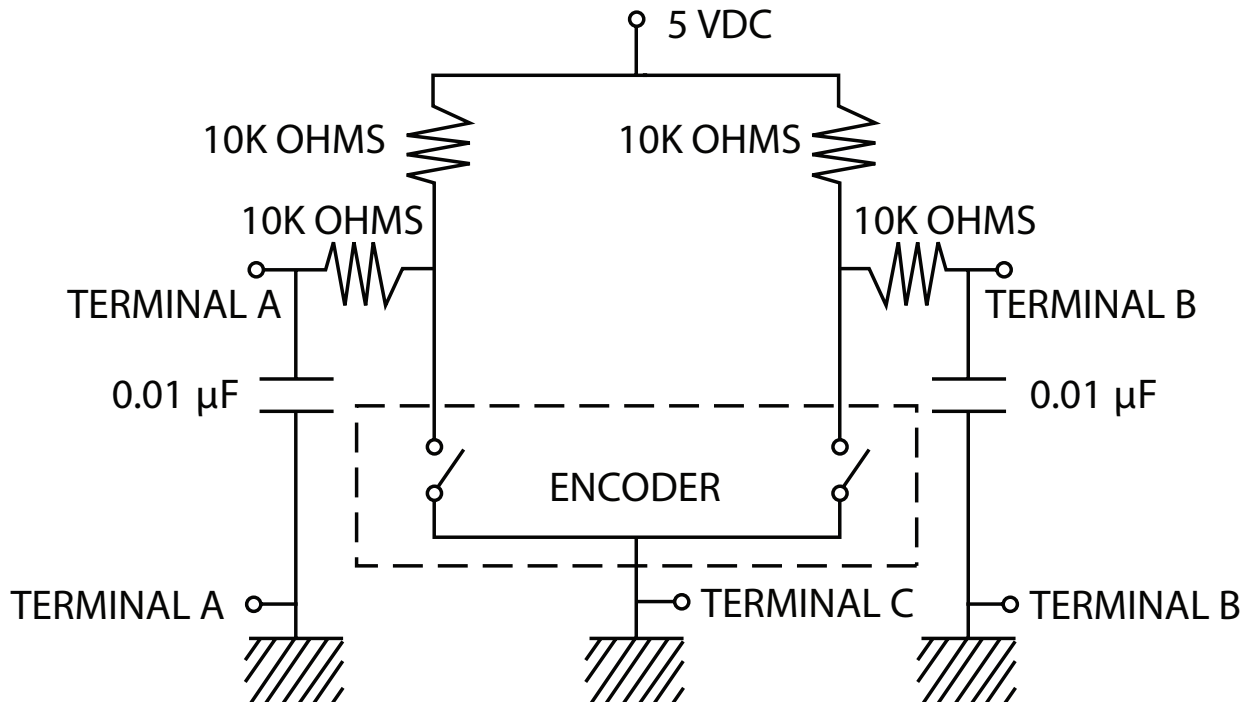
15 PPR, 30 Detent Model



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.



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

[sameskydevices.com](https://www.sameskydevices.com)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Same Sky:](#)

[RING28-161818-TH](#) [RING28-161530-TH](#)