

PART NUMBER: ACZ11BR2E-25SD1-20CZ-0663

#### **DESCRIPTION:** incremental encoder

## **ELECTRICAL SPECIFICATIONS**

output waveform	Square wave
output signals	A, B phase
current consumption	10 mA
output phase difference	T1, T3 ≥ 3.5ms
supply voltage	5 V dc at 10 mA
resistance load	12 V dc at 50 mA
output resolution (ppr)	20
contact resistance	200 m $\Omega$ max. (voltage step-down test at 5 V dc, 10 mA)
insulation resistance	300 V dc, 100MΩ min.
withstand voltage	300 V ac for 1 minute

### **MECHANICAL SPECIFICATIONS**

max shaft load, axial:	≥ 8 kgf
rotational torque	30 ~ 200 gf•cm
detent angle	18° ±3° (20 detent points)
switch circuit and number of pulses	single pole, single throw
push switch operational force	300 ~ 500 gf∙cm
push switch cycle life	50,000 cycles
rotational life	30,000 cycles

# **ENVIRONMENTAL SPECIFICATIONS**

operating temp	-10° to +75° C
storage temp	-20° to +85° C
heat resistance*	85 ± 3°C for 240 ± 10 hours
moisture resistance*	40 ± 2°C, 90~95% RH, for 240 ± 10 hours
low temperature resistance*	-40 ± 3°C for 240 ± 10 hours

\*Left at ambient temp. and humidity for 1.5 hours then measured. Rotational torque, output signal, phase difference, and insulation resistance will be the same as the initial spec.



**PART NUMBER:** ACZ11BR2E-25SD1-20CZ-0663

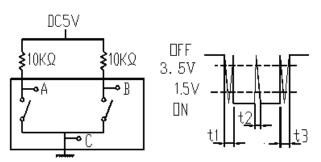
**DESCRIPTION:** incremental encoder

# OUTPUT PHASE DIFFERENCE



### CHATTERING

Measurements will be made by rotating the shaft at a speed of  $360^{\circ}$ /second. Chattering is specified by the signal's passage of time from 3.5 to 1.5 V or from 1.5 to 3.5 V of each switching position (code OFF $\rightarrow$ ON or ON $\rightarrow$ OFF).



## **MECHANICAL DRAWING**

