

Product Specifications

Series		EM11B	EM20B
Items			
Operating temperature range		-30°C to +85°C	-10°C to +70°C
Electrical performance	Rating	5V±5% DC	
	Output signal	V _{HI} : +4.0Vmin. V _{LO} : 0.5V max. (I _{sink} =5mA)	
	Output phase	A, B (Square wave)	
	Output type	Incremental	
	Insulation resistance	100MΩ min. 100V DC	100MΩ min. 250V DC
	Voltage proof	250V AC for 1minute	300V AC for 1minute
Mechanical performance	Rotational torque	—	7mN·m max.
	Detent torque	10±5mN·m	8±5mN·m
	Push-pull strength	100N	
	Resistance to soldering heat	Manual soldering	350°C max. 3s max.
Dip soldering		260°C max. 3s max.	
Durability	Operating life	1,000,000cycles	500,000cycles
Environmental performance	Cold	-40±3°C for 96h	-30±3°C for 240h
	Dry heat	85±3°C for 96h	80±3°C for 240h
	Damp heat	40±2°C, 90 to 95%RH for 96h	40±2°C, 90 to 95%RH for 240h

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package TypeMulti Control
Devices

TACT Switch™

Custom-
ProductsIncremental
TypeAbsolute
Type

Push-on Switch Specifications

Item	EM11B	EM20B
circuit · the number of contact	Single pole and single throw (Push-on)	
Travel (mm)	0.5 ^{+0.3} _{-0.2}	0.5 ^{+0.4} _{-0.3}
Operating force (N)	5.5±3	6±3
Rating	5mA 5V DC (50mA 12V DC max.)	
Contact resistance	500mΩ min.	100mΩ for initial period; 200mΩ after rotational life
Operating life	1,000,000times min.	25,000times min.