Model Number
NBN4-F29-E2-5M

Features
• Basic series
• 4 mm non-flush

Technical Data

General specifications
- Switching element function: PNP NO
- Rated operating distance: $d_n = 4$ mm
- Installation: non-flush
- Output polarity: DC
- Assured operating distance: $d_a = 0 \ldots 3.24$ mm
- Reduction factor $f_{d_a} = 0.4$
- Reduction factor $f_{d_{04}} = 0.7$

Nominal ratings
- Operating voltage: $U_d = 4.75 \ldots 30$ V DC
- Switching frequency: $f = 0 \ldots 1000$ Hz
- Hysteresis: $H$ typ. 5 %
- Reverse polarity protection: reverse polarity protected
- Short-circuit protection: yes
- Voltage drop: $U_d \leq 3$ V
- Operating current: $I_L = 0 \ldots 100$ mA
- Off-state current: $I_r = 0 \ldots 0.5$ mA typ. $0.1$ µA at $25$ °C
- No-load supply current: $I_0 \leq 10$ mA
- Time delay before availability: $t_v \leq 5$ ms
- Switching state indicator: LED, yellow

Functional safety related parameters
- MTTF $\alpha = 1680$ a
- Mission Time (TM): $20$ a
- Diagnostic Coverage (DC): $0$ %

Ambient conditions
- Ambient temperature: $-25 \ldots 70$ °C (-13 ... 158 °F)
- Storage temperature: $-40 \ldots 85$ °C (-40 ... 185 °F)

Mechanical specifications
- Connection type: cable PVC, 5 m
- Core cross-section: $0.14$ mm²
- Housing material: PPS
- Sensing face: PPS
- Degree of protection: IP67

Compliance with standards and directives
- Standard conformity
  - IEC 60947-5-2:2007
- Approvals and certificates
  - UL approval: cULus Listed, General Purpose
  - CSA approval: cCSAus Listed, General Purpose
  - CCC approval: CCC approval / marking not required for products rated $\leq 36$ V

Dimensions

Electrical Connection