

File E61760(N) 59045 and 59050 PCB Mount Features and Benefits



Features

- 2 Part Magnetically Operated Proximity Sensor
- Standard normally open and high voltage normally open contact configuration
- Subminiature 17mm (0.700") version available Moulded stand-offs to allow board washing

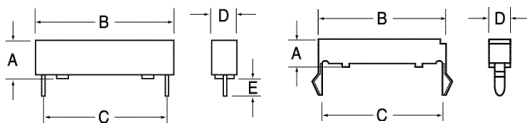
Benefits

- Mounts directly into printed circuit board
- No standby power requirement
- Operates through non-ferrous materials such as wood,plastic or aluminium
- Hermetically sealed,magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination
- Simple installation and adjustment

Applications

- Position and limit sensing
- Security system switch
- Door switch

DIMENSIONS



| | A Max | B Max | C ± .10 (0,25) | D Max | E ± .015 (0,38) |
|--------------|-------------|--------------|----------------|-------------|-----------------|
| 57045 | (.170) 4,32 | (.700) 17,78 | See Note Below | (.130) 3,3 | — |
| 57050 | (.265) 6,73 | (.900) 22,86 | See Note Below | (.180) 4,57 | — |
| 59045 | (.170) 4,32 | (.700) 17,78 | (.600) 15,24 | (.130) 3,3 | (.130) 3,30 |
| 59050 | (.180) 4,57 | (.900) 22,86 | (.800) 20,32 | (.170) 4,32 | (.130) 3,30 |

Mounting: (.062) 1,57 thick board, (.125) 3,17 holes. **57045** on (.540) 13,72 and **57050** on (.720) 18,28 nom. centers.

Recommended Activating Positions:



| Sensors and Matching Actuators (Note 2) | | Actuator | Sensor |
|---|--------------|-----------|-----------|
| Must Actuate | Must Release | | |
| .075 (1,90) | .550 (13,97) | 57045-000 | 59045-010 |
| .150 (3,81) | .750 (19,05) | 57050-000 | 59050-010 |
| | | | 59050-020 |

| Electrical Specifications and Operating Characteristics | | | Form A SPST-NO Standard | Form A SPST-NO High Voltage |
|---|-----------------|-------------|-------------------------------|-----------------------------------|
| Contact Type | | | | |
| Contact Rating | | Watt - max. | 10 | 10 |
| Voltage | Switching | Vdc - max. | 200 | 300 |
| | Breakdown | Vdc - min. | 250 | 450 |
| Current | Switching | A - max. | 0.5 | 0.5 |
| | Carry | A - max. | 1.0 | 1.5 |
| Resistance | Contact,Initial | - max. | 0.2 | 0.2 |
| | Insulation | - min. | 10 ¹⁰ | 10 ¹⁰ |
| Capacitance | Contact | p F - typ. | 0.3 | 0.2 |
| Temperature | Operating | °C | -40 to + 105 | -20 to + 105 |
| | Storage | °C | -65 to + 105 | -65 to + 105 |
| Time | Operate | ms - typ. | 1.0 | 1.0 |
| | Release | ms - typ. | 1.0 | 1.0 |
| Shock | 11ms 1/2 sine | G - max. | 100 | 100 |
| Vibration | 50-2000 Hz | G - max. | 30 | 30 |

- Notes:
1. Board Mounting:
57045-000 requires (0.062) 1,57 thick board,(0.125) 3,17 dia.holes on (0.540) 13,72 nominal centers.
57050-000 requires (0.062) 1,57 thick board,(0.125) 3,17 dia.holes on (0.720) 18,28 nominal centers.
 2. Order Actuators as a separate item.
 3. Underwriters Laboratories recognition. For details on electrical specifications,contact Hamlin,Inc.

INFORMATION PROVIDED ON THIS DATA SHEET IS PROVIDED FOR INFORMATION PURPOSES ONLY AND SHOULD NOT BE RELIED UPON AS BEING ACCURATE FOR ANY PARTICULAR PURPOSE. Product performance may be affected by the application to which the product is put. Upon request,HAMLIN will assist purchasers by providing information specific to any particular application.HAMLIN disclaims any and all liability whatsoever for any purchaser's reliance upon the information contained on this data sheet without further consultation with authorised representatives of HAMLIN.

Breed Electronics USA Tel: 001 920 648 3000 • Fax:001 920 648 3001 • Email: sales@hamlin.com
Breed Electronics UK Tel: +44 (0)1379 649700 • Fax:+44 (0)1379 649702 • Email: uksales@breedtech.com
Breed Electronics Germany Tel: +49 (0) 6181 953660 • Fax:+49 (0) 6181 953666 • Email: hamlin-electronics.de@breedtech.com
Breed Electronics France Tel: +33 1 46 87 02 02 • Fax:+33 1 46 86 67 86 • Email: hamectrol@hamectrol.fr