## Product Code: $5 \mathrm{~N} 22+107$ DUN

Serial Number: $\qquad$ GD106978

## Operating Instructions:

There are two drive coils inside the switch which are used individually to set the switch in each of the two possible optical states. To change the state of the switch, apply a 5 VDC drive pulse of approximately 20 msec or longer on the electrical drive pins as indicated in the table below. Once the switch has been moved to the new position, it will remain there until a drive pulse appears on the drive coil for the other path. Typical operating current is 40 mA during switching.

There are two sets of single pole double throw contacts which are also operated by the switch. These can be used to sense the position of the switch or to operate other circuits based on the switch path chosen.

Optical


Physical View of the Bottom of the Switch
Showing Location of Electrical Pins


| Optics Path | Electrical Drive |  |  |  |  | Status Contacts |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Pin \# | 1 | 12 | 2 | 11 | $3-5$ | $3-6$ | $10-7$ | $10-8$ |  |  |
| $1-3,4-2$ | Reset | 0 | 0 | Gid | +5 VDC | Closed | Open | Open | Closed |  |  |
| $1-2,4-3$ | Set | Gid | +5 VDC | 0 | 0 | Open | Closed | Closed | Open |  |  |

## Product Code: $5 N 22+10$ ZDUNC

Serial Number: GDIO6978

Test Results: Insertion Loss @ 5 Vdc

| Optical Path | Insertion Loss $^{1}$ (dB) @ 1300 nm | Insertion Loss $^{1}$ (dB)@ 1550 nm |
| :---: | :---: | :---: |
| $1-3$ | 0.55 | 0.57 |
| $1-2$ | 0.59 | 0.49 |
| $4-2$ | 0.47 | 0.50 |
| $4-3$ | 0.52 | 0.52 |

Noles: 1-Includes the loss of one connector in connectorized versions.

Test Results: Return Loss @ 5 Vdc

| Optical Path | Return Loss $^{2}$ (dB) @1300 nm | Return Loss $^{2}(\mathrm{~dB}) @ 1550 \mathrm{~nm}$ |
| :---: | :---: | :---: |
| $1-3$ | 63.2 | 58.0 |
| $1-2$ | 59.9 | 58.9 |
| $4-2$ | 61.3 | 61.1 |
| $4-3$ | 61.4 | 61.3 |

Notes: 2-Excluding connectors

Product Code: $5 \mathrm{~N} 22+107$ DUNC Serial Number: GDIOG978

$\xrightarrow[\text { for Switch }]{\stackrel{\text { Set Reset }}{\longrightarrow}} \stackrel{\text { Electrical Status Contacts }}{\stackrel{~}{4}}$
Electrical Drive for Switch Electrical Status Contacts
$\qquad$

## Product Code: $5 N 22+107$ DUNC

Serial Number: GDIO6977

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Tel 613 727-1304
Sales 613727-1303
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## Operating Instructions:

There are two drive coils inside the switch which are used individually to set the switch in each of the two possible optical states. To change the state of the switch, apply a 5 VDC drive pulse of approximately 20 msec or longer on the electrical drive pins as indicated in the table below. Once the switch has been moved to the new position, it will remain there until a drive pulse appears on the drive coil for the other path. Typical operating current is 40 mA during switching.

There are two sets of single pole double throw contacts which are also operated by the switch. These can be used to sense the position of the switch or to operate other circuits based on the switch path chosen.

Optical


Physical View of the Bottom of the Switch Showing Location of Electrical Pins


| Optics Path | Electrical Drive |  |  |  |  | Status Contacts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pin \# | 1 | 12 | 2 | 11 | $3-5$ | $3-6$ | $10-7$ | $10-8$ |
|  | Reset | 0 | 0 | Gnd | +5 VDC | Closed | Open | Open | Closed |
| $1-3,4-2$ | Resen | 0 | Open | Closed | Closed | Open |  |  |  |
| $1-2,4-3$ | Set | Gnd | +5 VDC | 0 | 0 | Open |  |  |  |

## Product Code: 5 N22+107DUNC

Serial Number: GD106977

Test Results: Insertion Loss @ 5 Vdc

| Optical Path | Insertion Loss $^{1}$ (dB)@ 1300 nm | Insertion Loss $^{1}$ (dB) @ 1550 nm |
| :---: | :---: | :---: |
| $1-3$ | 0.51 | 0.57 |
| $1-2$ | 0.72 | 0.74 |
| $4-2$ | 0.40 | 0.66 |
| $4-3$ | 0.36 | 0.55 |

Notes: 1 - Includes the loss of one connector in connectorized versions.

Test Results: Return Loss @ 5 Vdc

| Optical Path | Return Loss $^{2}$ (dB) @1300 nm | Return Loss $^{2}$ (dB)@1550 nm |
| :---: | :---: | :---: |
| $1-3$ | 58.5 | 57.6 |
| $1-2$ | 61.3 | 59.5 |
| $4-2$ | 60.3 | 62.4 |
| $4-3$ | 62.5 | 765 |

Notes: 2 - Excluding connectors

Product Code: SN22+107DUNC

Serial Number: G0106977

Optical and Internal Connections

$\qquad$ 182000

