



# PHOTO INTERRUPTER

## APPLICATIONS

- Photo Detector, • Image Scanners

## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

### INPUT :

- Power Dissipation ..... Pd=100mW
- Reverse Voltage ..... VR=5V
- Forward Current ..... If=60mA
- Peak Forward Current (tw=100usec.T=10msec.) ..... IFP=1A

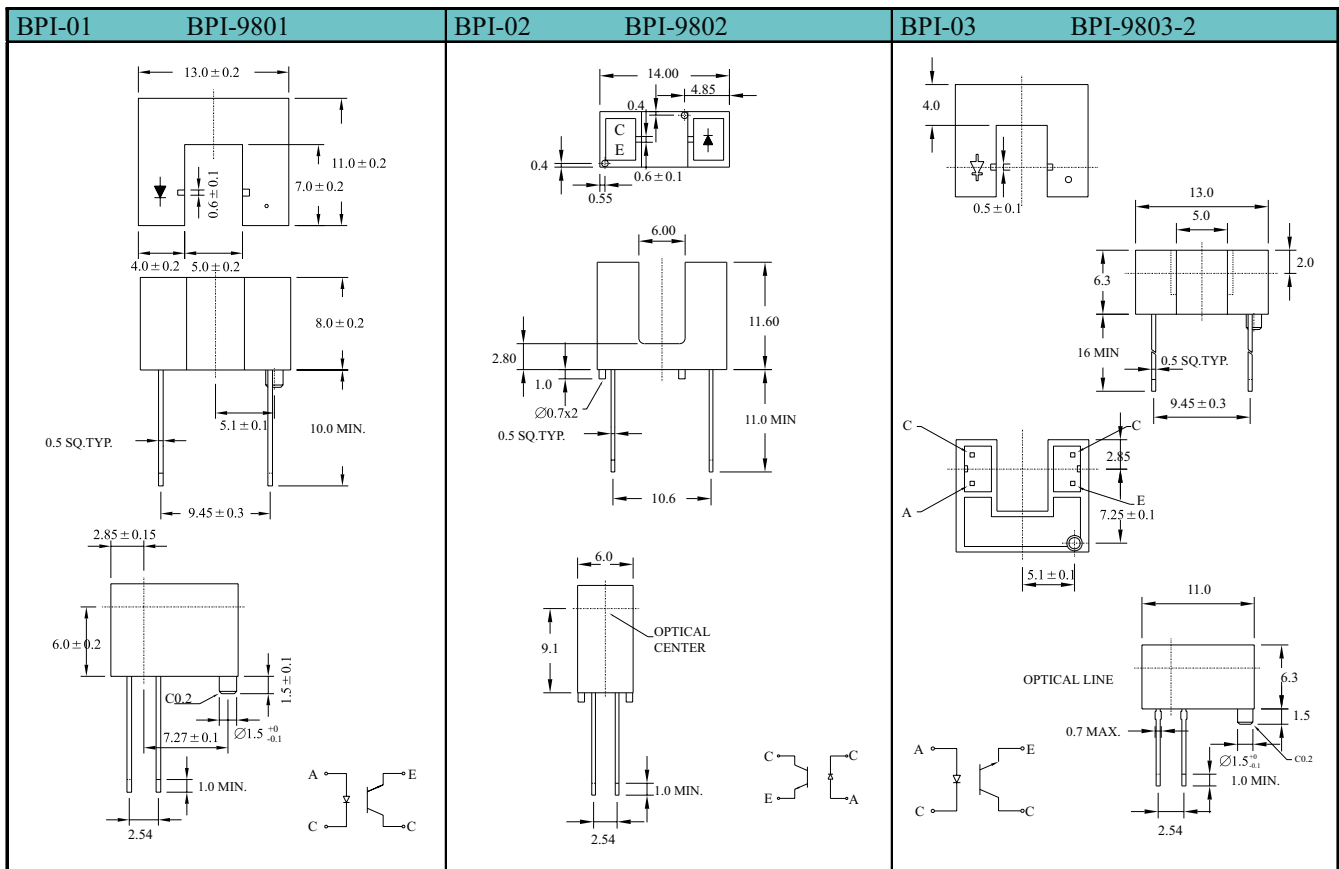
### OUTPUT :

- Collector Power Dissipation ..... Pd=100mW
- Collector Current ..... Ic=40mA Typ.
- Collector-Emitter Breakdown Voltage ..... BVceo=30V Max.
- Emitter - Collector Breakdown Voltage ..... BVeco=5.0V Max.
- Operating Temperature ..... Topr=-30°C~+85°C
- Storage Temperature ..... Tstg=-30°C~+100°C
- Soldering Temperature ..... Tsol=260°C,t=5Sec.

## ELECTRICAL AND RADIANT CHARACTERISTICS (Ta=25°C)

| Part No.   | Input                |      |                      |      |             |   | Output |                                     |      |  |      |   | Speed |   |      |                         |      |      |    |    |  |
|------------|----------------------|------|----------------------|------|-------------|---|--------|-------------------------------------|------|--|------|---|-------|---|------|-------------------------|------|------|----|----|--|
|            | Vf<br>If=20mA<br>(V) |      | Ir<br>Vr=10V<br>(uA) |      | λ p<br>(nm) | Radiant<br>Power<br>(mw/cm <sup>2</sup> ) |        | Dark Current<br>Iceo(nA)<br>Vce=10V |      | C-E Saturation<br>Voltage Vce(Sat)<br>Ic=500uA/If=20mA |      | Collector Light<br>Current IC(mA)<br>Vce=5V,If=20mA |       | Leakage Current<br>Vce=5V,If=20mA<br>Iceod( uA) |      | Rise/Fall<br>Time(usec) |      |      |    |    |  |
|            | Typ.                 | Max. | Min.                 | Max. | Typ.        | Min.                                      | Max.   | Min.                                | Max. | Min.   | Typ. | Max.  | Min.  | Typ.  | Max. | Min.                    | Typ. | Max. |    |    |  |
| BPI-9801   |                      |      |                      |      |             |   |        |                                     |      |  |      |   |       |   |      |                         |      |      |    |    |  |
| BPI-9802   | 1.2                  | 1.6  | -                    | 10   | 940         | 1.0                                       | 4.5    | -                                   | 100  | -  | -    | 0.4   | 1.0   | 2.0   | 5.0  | -                       | -    | 20   | 10 | 10 |  |
| BPI-9803-2 |                      |      |                      |      |             |   |        |                                     |      |  |      |   |       |   |      |                         |      |      |    |    |  |

- BPI-98xxxx (BIR-NM23C1)+(BPT-NP13C1)



Notes : 1.All Dimensions are in millimeters (inches).  
2.Tolerance is ± 0.25mm (.010").