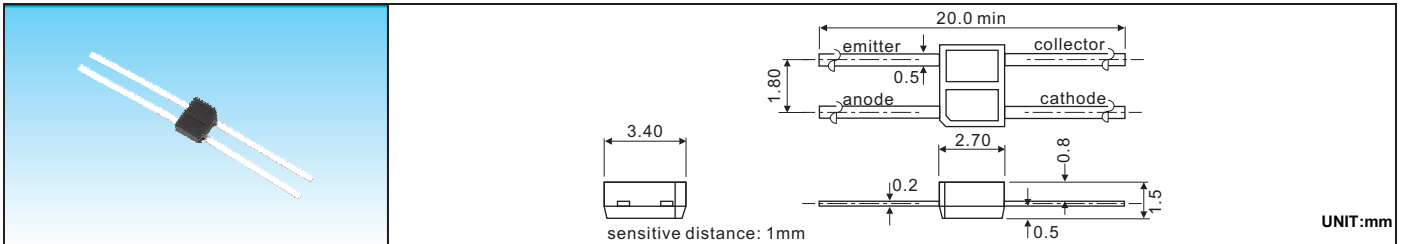




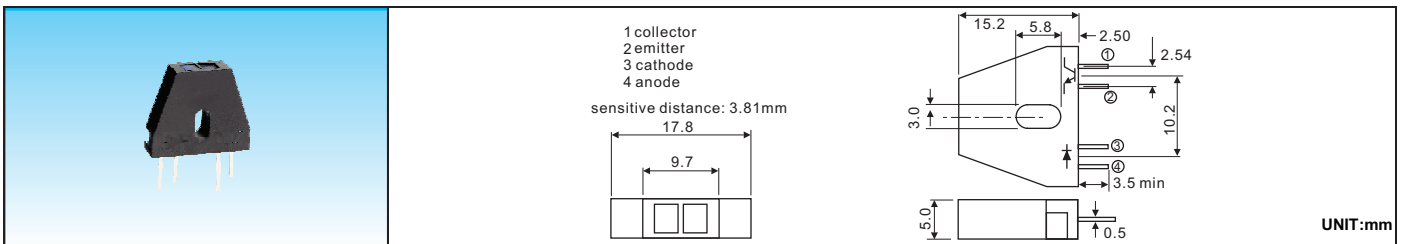
Reflector

Ta=25°C

| Device No | Feature | Electro-optical Characteristics | | | | | | |
|-----------|---------|---------------------------------|----|-----|---------|--------|--------|-------------|
| | | Ic Min | IF | VCE | ICEOMax | Tr Typ | Tf Typ | VCE(sat)Max |
| | | mA | mA | V | uA | us | us | V |



| | | | | | | | | |
|--------|------------------------|------|----|---|-----|----|----|-----|
| HRS-CD | reflector distance 1mm | 0.23 | 20 | 5 | 1.0 | 40 | 60 | 0.4 |
|--------|------------------------|------|----|---|-----|----|----|-----|



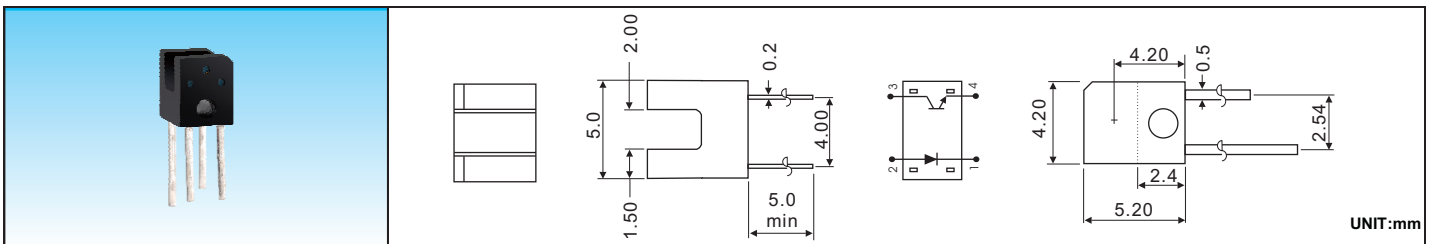
| | | | | | | | | |
|----------|---------------------------|------|----|---|-----|----|----|-----|
| HRS-4C2D | reflector distance 3.81mm | 0.16 | 20 | 5 | 0.2 | 20 | 20 | 0.4 |
|----------|---------------------------|------|----|---|-----|----|----|-----|



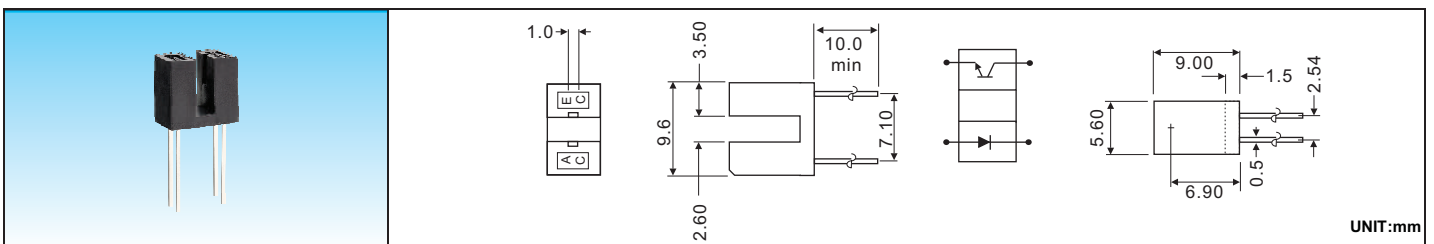
Photo Interrupter

Ta=25°C

| Device No | Feature | Electro-optical Characteristics | | | | | | |
|-----------|---------|---------------------------------|----|-----|---------|--------|--------|-------------|
| | | Ic Min | IF | VCE | ICEOMax | Tr Typ | Tf Typ | VCE(sat)Max |
| | | mA | mA | V | uA | us | us | V |



| | | | | | | | | |
|-----------|-----------|-----|----|---|-----|----|----|-----|
| HINT-2050 | gap=2.0mm | 0.5 | 20 | 5 | 0.5 | 10 | 10 | 0.4 |
|-----------|-----------|-----|----|---|-----|----|----|-----|


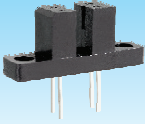




| | | | | | | | | |
|-----------|-----------|-----|----|---|-----|----|----|-----|
| HINT-2600 | gap=2.6mm | 1.0 | 10 | 5 | 0.1 | 20 | 20 | 0.4 |
|-----------|-----------|-----|----|---|-----|----|----|-----|

Photo Interrupter



Ta=25°C

| Device No | Feature | Electro-optical Characteristics | | | | | | | |
|---|-----------|---------------------------------|-----|-----|---------|--------|--------|-------------|-----|
| | | Ic Min | IF | VCE | ICEOMax | Tr Typ | Tf Typ | VCE(sat)Max | |
| | | mA | mA | V | uA | us | us | V | |
|  | gap=3.0mm | | 0.5 | 20 | 5 | 0.1 | 20 | 20 | 0.4 |
|  | gap=3.1mm | | 2 | 20 | 5 | 20 | 15 | 15 | 1.0 |
|  | gap=5.0mm | | 1.0 | 20 | 5 | 0.1 | 15 | 15 | 0.4 |
|  | gap=5.2mm | | 0.5 | 20 | 5 | 0.1 | 20 | 20 | 0.4 |