

- suggest customer to use IR/PT968 instead of IR/PT958. The comparison of spec and dimension is attached in the Appendix.
- 2. All affected products and part numbers, please refer to the attachment.
- 3. This PCN is based on the **ECR000037180** which is following Everlight's internal and formal process.

Anticipated (positive and negative) impact on form, fit, function, quality or reliability:

NA

Specification

Material

Equipment

Data Sheet

Packing

Other

Supplier Qualification plan schedule and/or results, where applicable:

NA



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| Forecasted key | Date | | | |
|---|------------------------------------|----------------|--|--|
| Date, if required, when final qualifica | Available now | | | |
| Proposed First Ship Date for change. | Available now | | | |
| Last date, if applicable, of manufactu | Jan/20/2014 | | | |
| Last buy date. | | Jan/20/2014 | | |
| Customer acknowledgement of receip | pt within 30 days of delivery of t | he PCN: | | |
| | | | | |
| Customer: | Approval for sh effective date | ipments before | | |
| Name/Date: | E-mail/Address: | | | |
| Title: | Phone/Fax: | | | |
| Customer Comments: | | | | |
| | | | | |
| | | | | |
| EVERLIGHT acknowledgement of 1 | receipt: | | | |
| RECORD BY: | DATE: month. | /day/year | | |

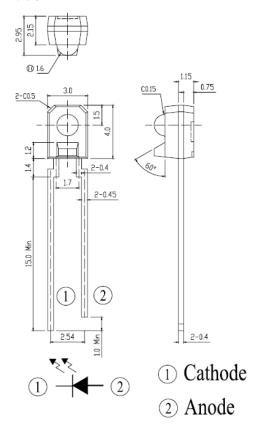
- 1. The document of individual PCN information will be retained for a minimum of 5 years
- 2. When the product to terminate production, check

 PRODUCT TERMINATION **NOTIFICATION.**

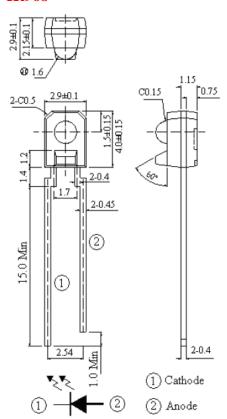
Appendix

1. Dimension Comparison

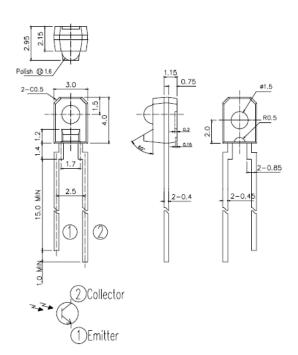
IR958



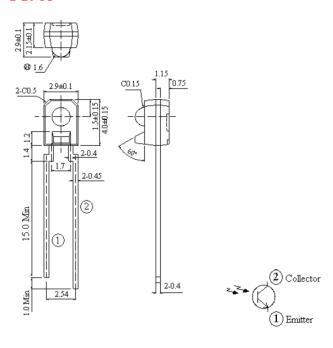
IR968



PT958



PT968



2. Electro-Optical Characteristic Comparison

IR958

■ Electro-Optical Characteristics (Ta=25°C)

| Parameter | Symbol | Min | Тур | Max | Unit | Condition |
|--------------------|---------|-----|-----|------|---------|---|
| Collector Current | Ic(on) | 306 | - | 1870 | μ A | I _F =4mA,V _{CE} =3.5V |
| Peak Wavelength | λр | - | 950 | - | nm | $I_F = 20 \text{mA}$ |
| Spectral Bandwidth | Δλ | - | 40 | - | nm | $I_F = 20 \text{mA}$ |
| View Angle | 2 0 1/2 | - | 25 | - | Deg | $I_F = 20 \text{mA}$ |
| Forward Voltage | V_{F} | - | 1.2 | 1.5 | V | $I_F = 20 \text{mA}$ |
| Reverse Current | I_R | - | - | 10 | μΑ | V _R =5V |

IR968

Electro-Optical Characteristics (Ta=25°C)

| Parameter | Symbol | Min | Тур | Max | Unit | Condition |
|--------------------|----------------|-----|-----|------|------|---|
| Collector Current | lc(on) | 465 | - | 1274 | μA | I _F =4mA,V _{CE} =3.5V |
| Peak Wavelength | λр | - | 940 | - | nm | I _F =20mA |
| Spectral Bandwidth | Δ λ | - | 45 | - | nm | I _F =20mA |
| View Angle | 201/2 | - | 25 | - | Deg | I _F =20mA |
| Forward Voltage | V _F | - | 1.2 | 1.5 | ٧ | I _F =20mA |
| Reverse Current | I _B | - | - | 10 | μA | V _R =5V |

PT958

Electro-Optical Characteristics (Ta=25°C)

| Parameter | Symbol | Condition | Min. | Тур. | Max. | Units | |
|--|-------------------------------|---|------|------|------|-------|--|
| Collector – Emitter Breakdown Voltage | BV _{CEO} | I_C =100 μ A Ee=0mW/cm ² | 30 | | | V | |
| Emitter-Collector Breakdown Voltage | BVECO | I_E =100 μ A Ee=0mW/cm ² | 5 | | | V | |
| Collector-Emitter Saturation Voltage | $V_{(\text{CE})(\text{sat})}$ | I _C =2mA Ee=1mW/cm ² | | | 0.4 | V | |
| Rise Time | tr | $V_{CE}=5V$ $I_{C}=1mA$ | | 15 | | μS | |
| Fall Time | t _f | RL=1000Ω | | 15 | | - | |
| Collector Dark Current | I _{CEO} | Ee=0mW/cm ² V _{CE} =20V | - | | 100 | nА | |
| On State Collector Current | $I_{\text{C}(\text{on})}$ | Ee=0.555mW/cm ² V _{CE} =5V | 0.53 | 1 | 3.41 | mA | |
| Wavelength of Peak Sensitivity | λp | | | 940 | | nm | |
| Rang of Spectral Bandwidth | λ 0.5 | | 400 | | 1100 | nm | |

PT968

Electro-Optical Characteristics (Ta=25℃)

| Parameter | Symbol | Min. | Тур. | Max. | Unit | Condition |
|--|----------------------|------|------|------|------|---|
| Collector – Emitter Breakdown Voltage | BV _{CEO} | 30 | | | v | I _C =100μA Ee=0mW/cm ² |
| Emitter-Collector Breakdown Voltage | BV _{ECO} | 5 | | | V | I _E =100μA Ee=0mW/cm ² |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | | | 0.4 | V | I _C =2mA Ee=1mW/cm ² |
| Rise Time | t _r | | 15 | | | V _{CE} =5V |
| Fall Time | t _f | | 15 | | μS | I _C =1mA RL=1000Ω |
| Collector Dark Current | I _{CEO} | | | 100 | nA | Ee=0mW/cm ² V _{CE} =20V |
| On State Collector Current | I _{C(on)} | 1.59 | | 3.41 | mA | Ee=0.555mW/cm ² VCE=5V |
| Rang Of Spectral Bandwidth | λ _{0.5} | 400 | | 1100 | nm | |
| Wavelength of Peak Sensitivity | λр | | 940 | | nm | |
| Half sensitivity angle | 201/2 | | ±11 | | Deg | |