



PTIR (Through Hole & SMD)

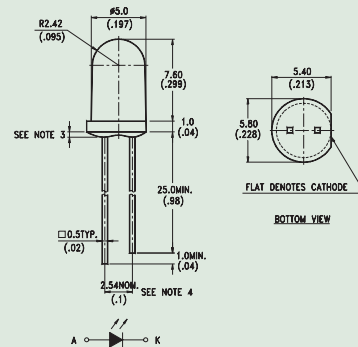
Lite-On offers a broad range of discrete infrared components for application such as remote control, IR wireless data transmission, security alarm & etc. Customers need infrared solutions featuring high power, high speed, wide viewing angles, high signal noise ratio and UL safety approval. The product line includes GaAs 940nm IREDs, AlGaAs high power 880nm IREDs, AlGaAs high speed 875nm/850nm IREDs, PIN Photodiodes, Phototransistors and Photodarlington. Photodiodes and Phototransistors can be provided with a filter that reduces ambient light noise in the sensor function, which enables a high signal-to-noise ratio.

PTIR (Through Hole & SMD)

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 φ

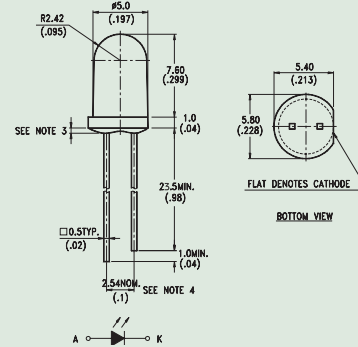


Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(Ie Typ.)	Forward Voltage V _F Typ. @ I _F =20mA
LTE-3279K	940nm	Light Blue Transparent	60°	6.7mW/cm ² (50.0mW/sr) @ I _F =100mA	1.4V @I _F =100mA

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 φ

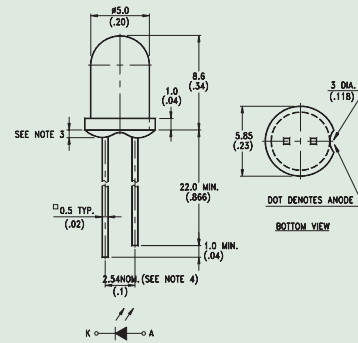


Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(Ie Typ.)	Forward Voltage V _F Typ. @ I _F =20mA
LTE-3271B	940nm	Water Clear	50°	1.8mW/cm ² (13.5mW/sr) @ I _F =20mA	1.25V @I _F =50mA
LTE-3271BL	940nm	Blue Transparent	50°	1.8mW/cm ² (13.5mW/sr) @ I _F =20mA	1.25V @I _F =50mA

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 φ



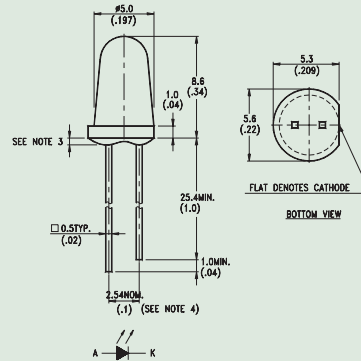
Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(Ie Typ.)	Forward Voltage V _F Typ. @ I _F =20mA
LTE-5208A	940nm	Water Clear	40°	1.4mW/cm ² (10.5mW/sr) @ I _F =20mA	1.2V
LTE-5208AC	940nm	Smoke	40°	1.4mW/cm ² (10.5mW/sr) @ I _F =20mA	1.2V

PTIR (Through Hole & SMD)

Infrared Emitting Diodes - Top View



T-1 3/4 Top View 0.1" Pitch 5 φ

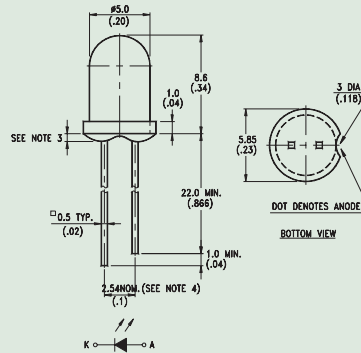


Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle $2 \theta^{1/2}$ *	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-2871	940nm	Water Clear	16°	1.6mW/cm ² (12.0mW/sr) @ $I_f=20mA$	1.2V
LTE-2872U	940nm	Water Clear	16°	1.6mW/cm ² (12.0mW/sr) @ $I_f=20mA$	1.2V

Infrared Emitting Diodes - Top View



T-1 3/4 Top View 0.1" Pitch 5 φ

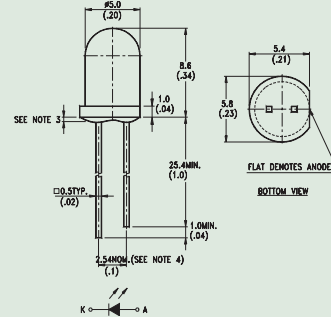


Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle $2 \theta^{1/2}$ *	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-5238A	880nm	Water Clear	40°	1.0mW/cm ² (7.5mW/sr) @ $I_f=20mA$	1.3V
LTE-5238AC	880nm	Smoke	40°	1.0mW/cm ² (7.5mW/sr) @ $I_f=20mA$	1.3V

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 ϕ

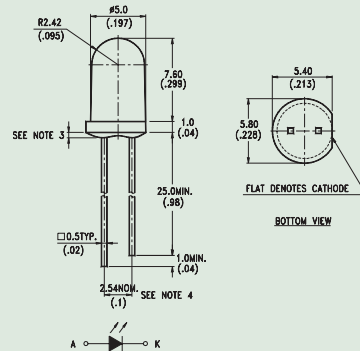


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) E_e Typ.(Ie Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-4238	880nm	Water Clear	20°	1.4mW/cm ² (10.5mW/sr) @ $I_f=20mA$	1.3V
LTE-4238C	880nm	Smoke	20°	1.4mW/cm ² (10.5mW/sr) @ $I_f=20mA$	1.3V

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 ϕ

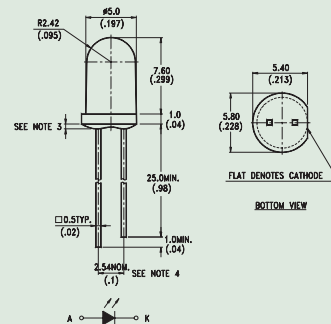


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) E_e Typ.(Ie Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-3677	875nm	Water Clear	30°	5.1mW/cm ² (38.0mW/sr) @ $I_f=50mA$	1.5V @ $I_f=50mA$

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 ϕ



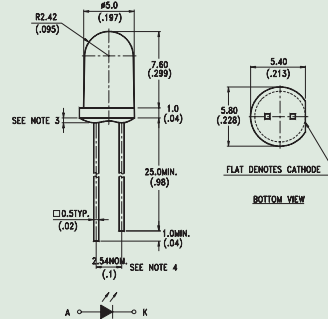
Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) E_e Typ.(Ie Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-3376	850nm	Water Clear	30°	8.0mW/cm ² (45.0mW/sr) @ $I_f=50mA$	1.6V @ $I_f=50mA$

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Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 φ

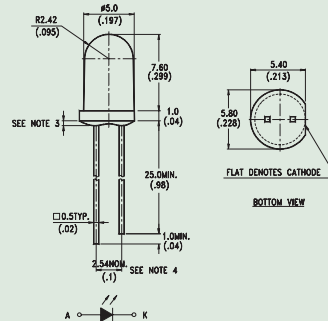


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V _f Typ. @ I _f =20mA
LTE-3226	850nm	Water Clear	25°	8.75mW/cm ² (65.0mW/sr) @ I _f =50mA	1.6V @I _f =50mA

Infrared Emitting Diodes - Top View



T-1³/₄ Top View 0.1" Pitch 5 φ

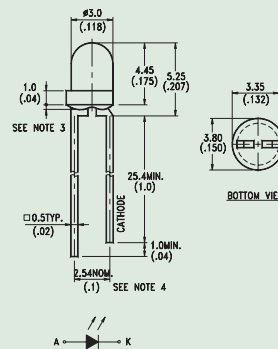


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V _f Typ. @ I _f =20mA
LTE-3276	850nm	Water Clear	50°	4.25mW/cm ² (32.0mW/sr) @ I _f =50mA	1.6V @I _f =50mA

Infrared Emitting Diodes - Top View



T-1 Top View 0.1" Pitch 3 φ

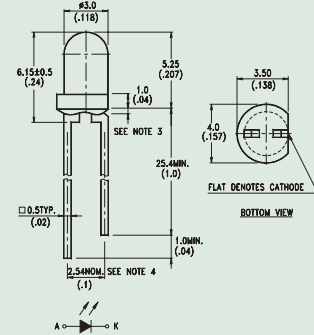


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V _f Typ. @ I _f =20mA
LTE-1650	940nm	Water Clear	60°	0.5mW/cm ² (3.4mW/sr) @ I _f =20mA	1.2V

Infrared Emitting Diodes - Top View



T-1 Top View 0.1" Pitch 3 ϕ

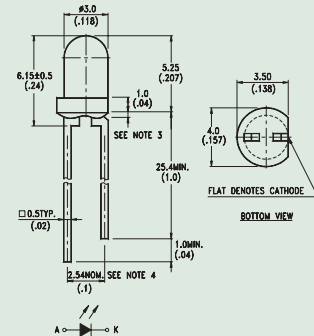


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta_{1/2}^*$	Aperture Radiant Incidence (Radiant Intensity) E_e Typ. (I _e Typ.)	Forward Voltage V_f Typ. @ I _f =20mA
LTE-4206	940nm	Water Clear	20°	0.7mW/cm ² (5.26mW/sr) @ I _f =20mA	1.2V
LTE-4206C	940nm	Smoke	20°	0.7mW/cm ² (5.26mW/sr) @ I _f =20mA	1.2V
LTE-4209	850nm	Water Clear	25°	4.4mW/cm ² (33mW/sr) @ I _f =50mA	1.5V @ I _f =50mA

Infrared Emitting Diodes - Top View



T-1 Top View 0.1" Pitch 3 ϕ



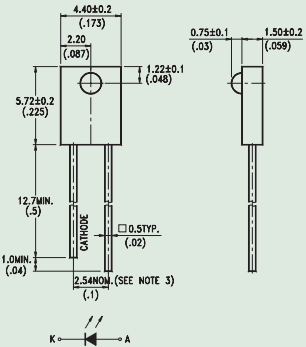
Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta_{1/2}^*$	Aperture Radiant Incidence (Radiant Intensity) E_e Typ. (I _e Typ.)	Forward Voltage V_f Typ. @ I _f =20mA
LTE-1653	940nm	Water Clear	50°	2.0mW/cm ² (15mW/sr) @ I _f =50mA	1.25V @ I _f =50mA
LTE-1653K	940nm	Light Blue Transparent	50°	2.0mW/cm ² (15mW/sr) @ I _f =50mA	1.25V @ I _f =50mA

PTIR (Through Hole & SMD)

Infrared Emitting Diodes - Side Look



Side Look

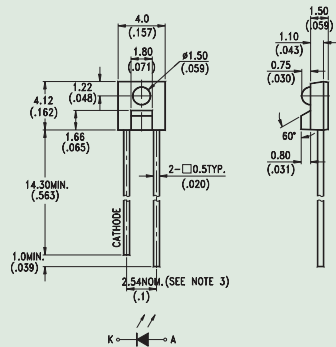


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-302-M	940nm	Water Clear	40°	**	1.2V

Infrared Emitting Diodes - Side Look



Side Look

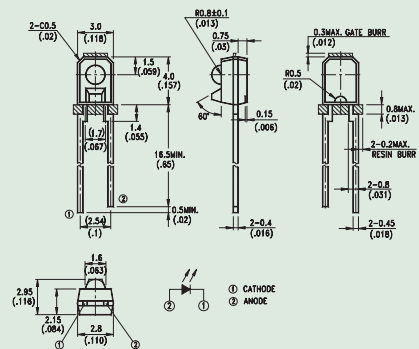


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-309	940nm	Water Clear	40°	**	1.2V

Infrared Emitting Diodes - Side Look

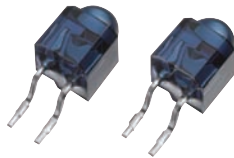


Side Look

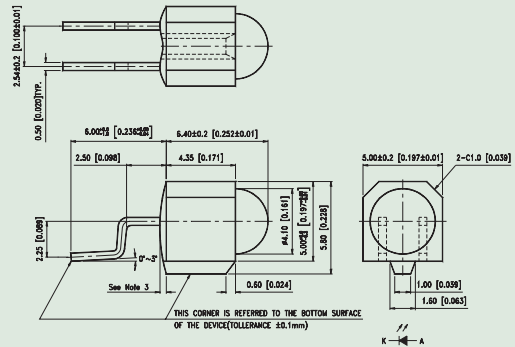


Part No.	Wave Length λ_p	Lens Color	Typical Viewing Angle $2 \theta^{1/2^*}$	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(le Typ.)	Forward Voltage V_f Typ. @ $I_f=20mA$
LTE-306	940nm	Water Clear	30°	0.2mW/cm ² (1.5mW/sr) @ $I_f=20mA$	1.2V

Infrared Emitting Diodes - SMD



T-1³/₄ SMD Side View 0.1" Pitch 5 φ

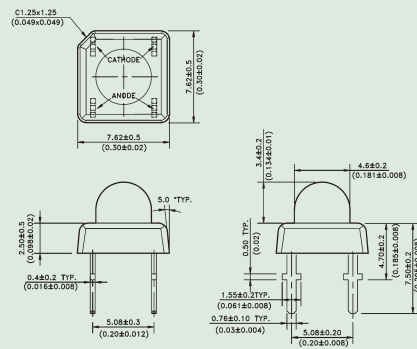


Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle 2 θ ^{1/2} *	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(Ie Typ.)	Forward Voltage V _F Typ. @ I _F =20mA
LTE-7377LM1-TA	880nm	Blue Transparent	16°	2.0mW/cm ² (15mW/sr) @ I _F =50mA	1.5V @ I _F =50mA

Infrared Emitting Diodes - Piranha



T-1³/₄ SMD Side View 0.1" Pitch 5 φ



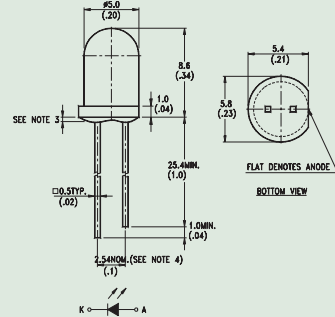
Part No.	Wave Length λ p	Lens Color	Typical Viewing Angle 2 θ ^{1/2} *	Aperture Radiant Incidence (Radiant Intensity) Ee Typ.(Ie Typ.)	Forward Voltage V _F Typ. @ I _F =20mA
LTE-916A15	850nm	Water Clear	15°	22mW/cm ² (170mW/sr) @ I _F =70mA	1.4V @ I _F =20mA
LTE-916A25	850nm	Water Clear	25°	18mW/cm ² (135mW/sr) @ I _F =70mA	1.4V @ I _F =20mA
LTE-919A40	850nm	Water Clear	40°	6.7mW/cm ² (50mW/sr) @ I _F =70mA	1.4V @ I _F =20mA
LTE-919A50	850nm	Water Clear	50°	5.3mW/cm ² (40mW/sr) @ I _F =70mA	1.4V @ I _F =20mA

PTIR (Through Hole & SMD)

Phototransistors



T-1 3/4 Top View 0.1" Pitch 5 φ

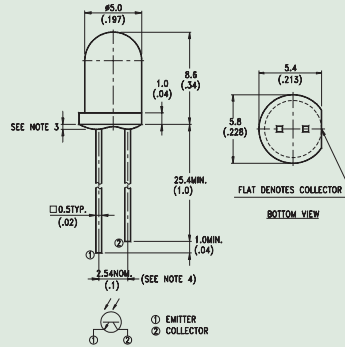


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @V _{CE} =10V	V _{CE(SAT)} Min. @I _C =100μA	V _{CE0} Min. @I _C =1mA
LTR-3208	Water Clear	No	8mA	100nA	0.4V	30V

Phototransistors



T-1 3/4 Top View 0.1" Pitch 5 φ

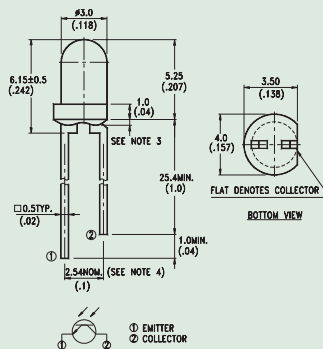


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @V _{CE} =10V	V _{CE(SAT)} Min. @I _C =100μA	V _{CE0} Min. @I _C =1mA
LTR-3208E	Dark	Yes	8mA	100nA	0.4V	30V

Phototransistors



T-1 Top View 0.1" Pitch 3 φ

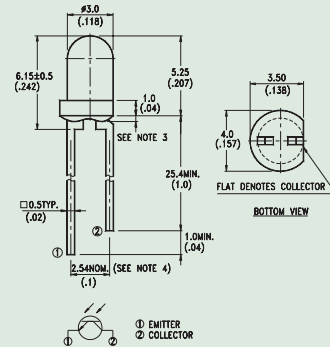


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @V _{CE} =10V	V _{CE(SAT)} Min. @I _C =100μA	V _{CE0} Min. @I _C =1mA
LTR-4206	Water Clear	No	4mA	100nA	0.4V	30V

Phototransistors



T-1 Top View 0.1" Pitch 3 ϕ

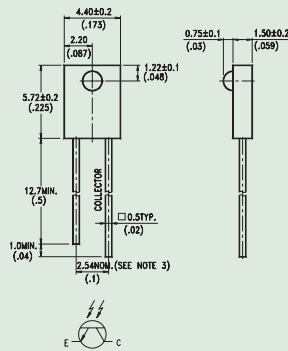


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @VCE=10V	VCE(SAT) Min. @Ic=100 μ A	VCEO Min. @Ic=1mA
LTR-4206E	Dark	Yes	4mA	100nA	0.4V	30V

Phototransistors



Side Look

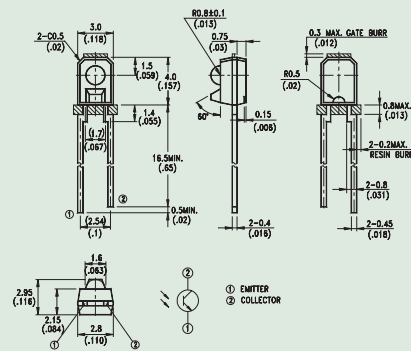


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @VCE=10V	VCE(SAT) Min. @Ic=100 μ A	VCEO Min. @Ic=1mA
LTR-301	Water Clear	No	2mA	100nA	0.4V	30V

Phototransistors



Side Look



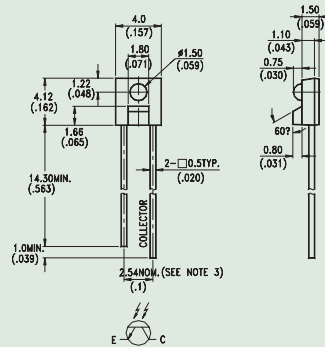
Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @VCE=10V	VCE(SAT) Min. @Ic=100 μ A	VCEO Min. @Ic=1mA
LTR-306	Red Clear	No	2mA	100nA	0.4V	30V

PTIR (Through Hole & SMD)

Phototransistors

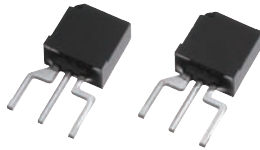


Side Look

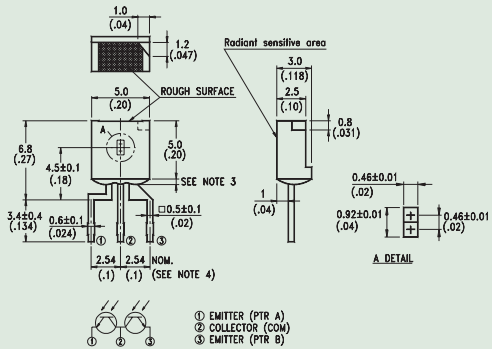


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @ $E_e=1\text{mW/cm}^2$	Dark Current Min. @ $V_{CE}=10\text{V}$	$V_{CE(SAT)}$ Min. @ $I_C=100\mu\text{A}$	V_{CE0} Min. @ $I_C=1\text{mA}$
LTR-309	Water Clear	No	2mA	100nA	0.4V	30V

Phototransistors



Side Look Tow Bits

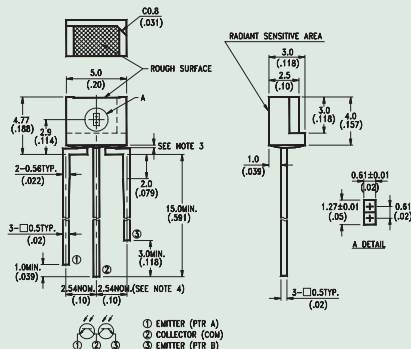


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @ $E_e=1\text{mW/cm}^2$	Dark Current Min. @ $V_{CE}=10\text{V}$	$V_{CE(SAT)}$ Min. @ $I_C=100\mu\text{A}$	V_{CE0} Min. @ $I_C=1\text{mA}$
LTR-5579DP1	Dark	Yes	0.3mA	100nA	0.4V	30V

Phototransistors



Side Look Tow Bits

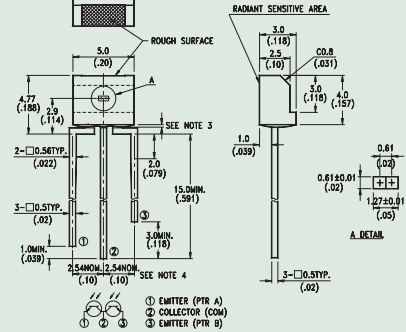


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @ $E_e=1\text{mW/cm}^2$	Dark Current Min. @ $V_{CE}=10\text{V}$	$V_{CE(SAT)}$ Min. @ $I_C=100\mu\text{A}$	V_{CE0} Min. @ $I_C=1\text{mA}$
LTR-5986D	Dark	Yes	0.5mA	100nA	0.4V	30V

Phototransistors



Side Look Tow Bits

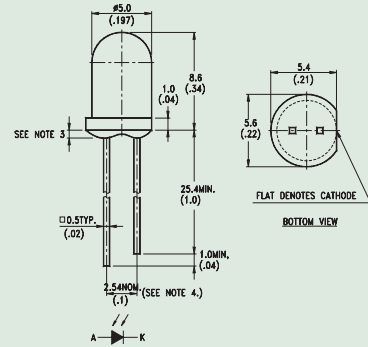


Part No.	Lens Color	Visible Light Filter	Light Current Typ. @Ee=1mW/cm ²	Dark Current Min. @V _{CE} =10V	V _{CE} (SAT) Min. @I _C =100μA	V _{CEO} Min. @I _C =1mA
LTR-5986H	Water Clear	No	0.5mA	100nA	0.4V	30V

Photodiodes



T-1 3/4 Top View 0.1" Pitch 5 φ

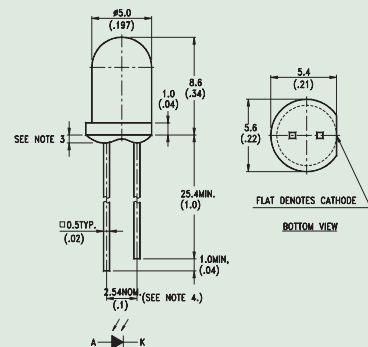


Part No.	Lens Color	Visible Light Filter	I _s Typ. @Ee=1mW/cm ² V _{CC} =5V	I _{D(R)} Max. @V _R =10V	V _{(BR)R} Min. @I _E =100μA
LTR-323DB	Dark	Yes	13 μA	30nA	30V

Photodiodes



T-1 3/4 Top View 0.1" Pitch 5 φ



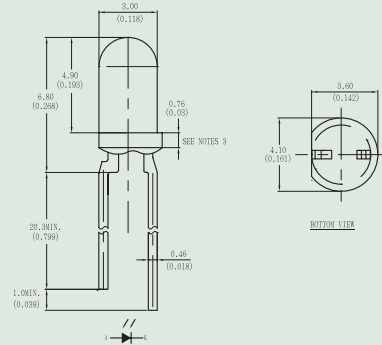
Part No.	Lens Color	Visible Light Filter	I _s Typ. @Ee=1mW/cm ² V _{CC} =5V	I _{D(R)} Max. @V _R =10V	V _{(BR)R} Min. @I _E =100μA
LTR-323D	Water Clear	No	13 μA	30nA	30V

PTIR (Through Hole & SMD)

Photodiodes



T-1 Top View 0.1" Pitch 3 ϕ

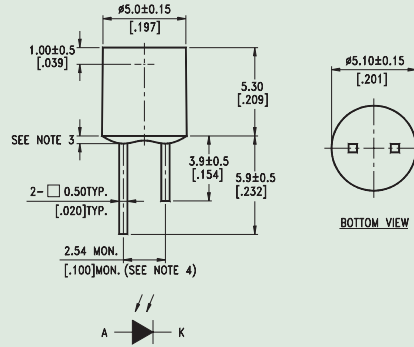


Part No.	Lens Color	Visible Light Filter	I_s Typ. @ $E_e=1\text{mW/cm}^2$ $V_{CC}=5\text{V}$	$I_{D(R)}$ Max. @ $V_R=10\text{V}$	$V_{(BR)R}$ Min. @ $I_E=100\mu\text{A}$
LTR-10DIDR	Dark	Yes	1.7 μA	10nA	33V

Photodiodes



T-13/4 Top View 0.1" Pitch 5 ϕ

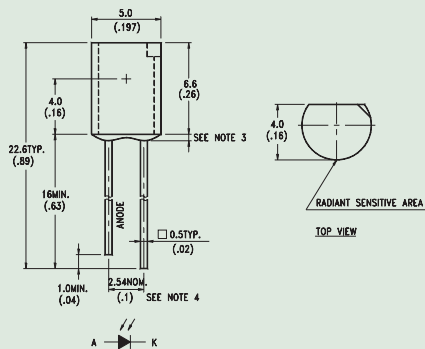


Part No.	Lens Color	Visible Light Filter	I_s Typ. @ $E_e=1\text{mW/cm}^2$ $V_{CC}=5\text{V}$	$I_{D(R)}$ Max. @ $V_R=10\text{V}$	$V_{(BR)R}$ Min. @ $I_E=100\mu\text{A}$
LTR-763DK-P1	Water Clear	No	1 μA ($E_e=1\text{mW/cm}^2$)	30nA	30V

Photodiodes



Side Look

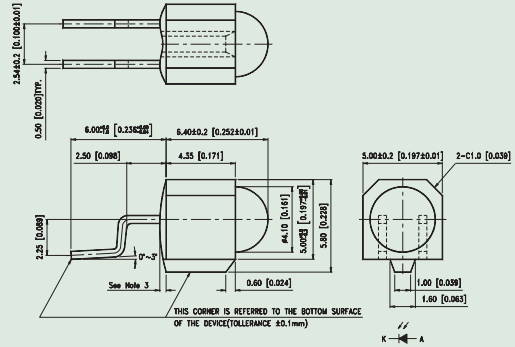


Part No.	Lens Color	Visible Light Filter	I_s Typ. @ $E_e=1\text{mW/cm}^2$ $V_{CC}=5\text{V}$	$I_{D(R)}$ Max. @ $V_R=10\text{V}$	$V_{(BR)R}$ Min. @ $I_E=100\mu\text{A}$
LTR-516AB	Dark	Yes	2 μA	30nA	30V
LTR-516AD	Dark	Yes	2 μA	30nA	30V

Photodiodes



SMD Side Look

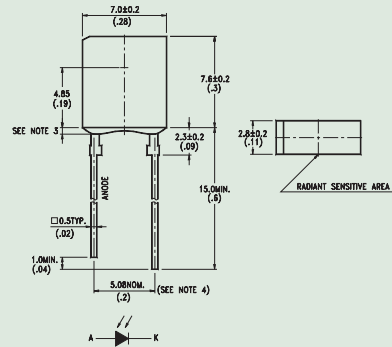


Part No.	Lens Color	Visible Light Filter	Is Typ. @Ee=1mW/cm ² V _{CC} =5V	I _{D(R)} Max. @V _R =10V	V _{(BR)R} Min. @I _E =100μA
LTR-733DBM1-TA	Dark	Yes	7 μA	30nA	30V

Photodiodes

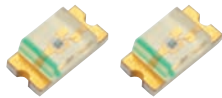


Side Look

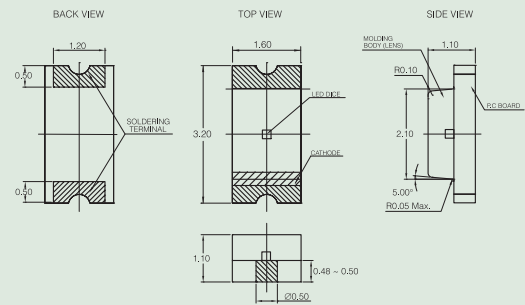


Part No.	Lens Color	Visible Light Filter	Is Typ. @Ee=1mW/cm ² V _{CC} =5V	I _{D(R)} Max. @V _R =10V	V _{(BR)R} Min. @I _E =100μA
LTR-546AB	Dark	Yes	2 μA	30nA	30V
LTR-546AD	Dark	Yes	2 μA	30nA	30V

SMD IR



SMD IR


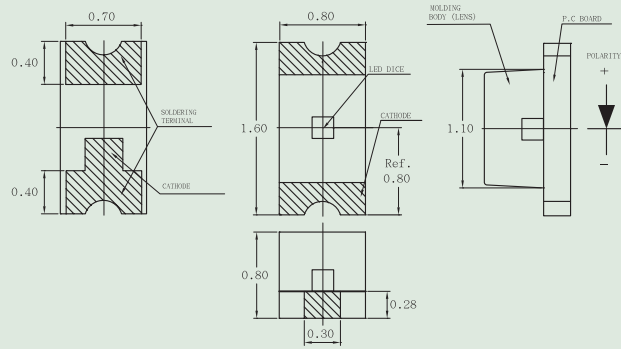


Notes : 1. All dimensions are in millimeters.
2. Tolerance is ±0.1 mm (.004") unless otherwise noted.

Part No.	Description		Typical Viewing Angle	Radiation Intensity I _e Typ min. (mW/sr) @20mA	V _f Type@I _F =20mA
	Wave Length λ _p	Lens Color			
LTE-C1501	940nm	Clear	130	0.8	1.2
LTE-C1506	850nm	Clear	130	1.05	1.45

PTIR (Through Hole & SMD)


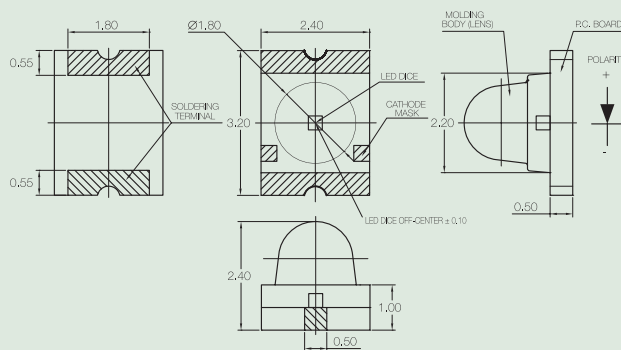
SMD IR

SMD IR

Part No.	Description		Typical Viewing Angle	Radiation Intensity I _e Typ min. (mW/sr) @20mA	V _i Type@IF=20mA
	Wave Length λ _p	Lens Color			
LTE-C1901	940nm	Clear	130	0.56	1.2
LTE-C1906	850nm	Clear	130	2.3	1.6


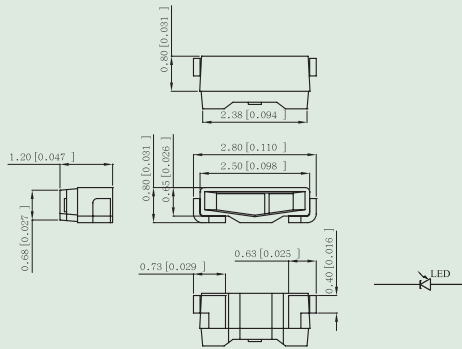
SMD IR

SMD IR

Part No.	Description		Typical Viewing Angle	Radiation Intensity I _e Typ min. (mW/sr) @20mA	V _i Type@IF=20mA
	Wave Length λ _p	Lens Color			
LTE-C9301	940nm	Clear	25	2.9	1.2
LTE-C9306	850nm	Clear	25	4	1.45

SMD IR

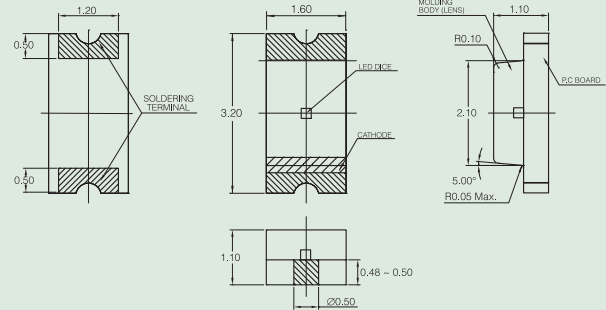
SMD IR

Part No.	Description		Typical Viewing Angle	Radiation Intensity I _e Typ min. (mW/sr) @20mA	V _i Type@IF=20mA
	Wave Length λ _p	Lens Color			
LTE-S0086	850nm	Clear	120	2.5	1.4

SMD PTR



SMD PTR

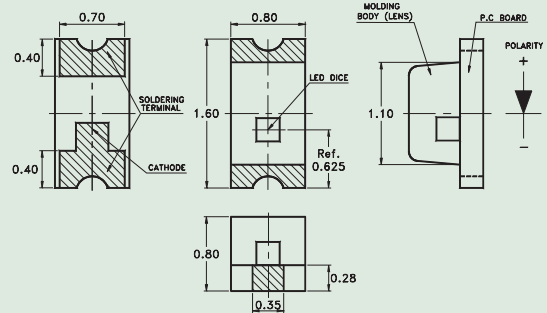


Part No.	Description		Ic(on)min.@VCE=5V Ee=1mW/cm ² λ=940nm	Dark Current max. Ie (nA)@VCE=10V	VCE(SAT) max. Ic=100μA	Vceo Min. @Ic=1mA
	Lens Color	Visible Light Fiber				
LTR-C1503B	Dark	Yes	0.8	100	0.4	30

SMD PTR

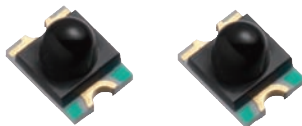


SMD PTR

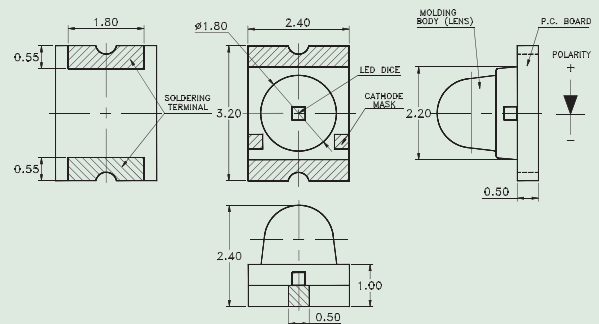


Part No.	Description		Ic(on)min.@VCE=5V Ee=1mW/cm ² λ=940nm	Dark Current max. Ie (nA)@VCE=10V	VCE(SAT) max. Ic=100μA	Vceo Min. @Ic=1mA
	Lens Color	Visible Light Fiber				
LTR-C1903B	Dark	Yes	0.19(Ee=0.5mW/cm ²)	100	0.4	30

SMD PTR



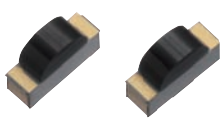
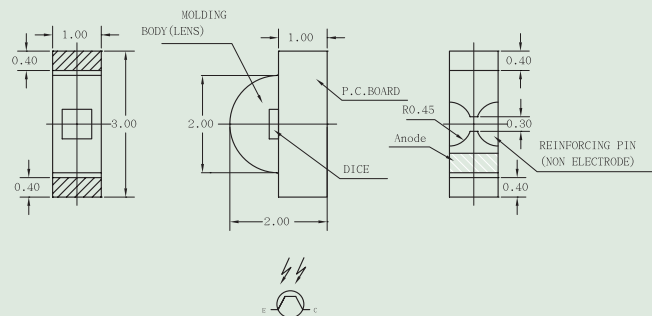
SMD PTR



Part No.	Description		Ic(on)min.@VCE=5V Ee=1mW/cm ² λ=940nm	Dark Current max. Ie (nA)@VCE=10V	VCE(SAT) max. Ic=100μA	Vceo Min. @Ic=1mA
	Lens Color	Visible Light Fiber				
LTR-C9303B	Dark	Yes	1.8(Ee=0.5mW/cm ²)	100	0.4	30

PTIR (Through Hole & SMD)

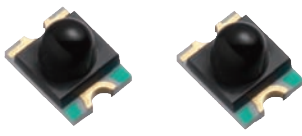
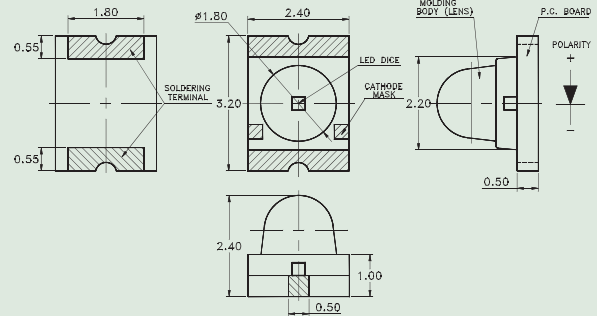
SMD PTR

SMD PTR

Part No.	Description		Ic(on)min.@VCE=5V Ee=1mW/cm ² λ=940nm	Dark Current max. Ie (nA)@VCE=10V	VCE(SAT) max. Ic=100μA	Vceo Min. @Ic=1mA
	Lens Color	Visible Light Fiber				
LTR-S3203B	Dark	Yes	0.19(Ee=0.5W/cm ²)	100	0.4	30

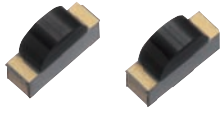
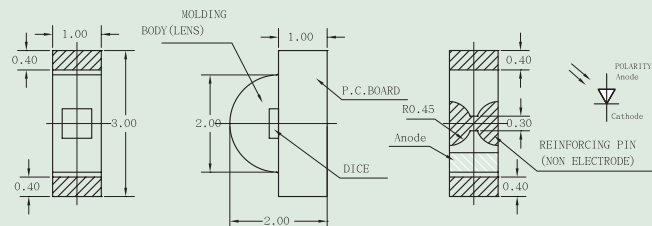
SMD PTD

SMD PTD

Part No.	Description		Is min.(μA)@VR=0V Ee=1mW/cm ² λp=850nm	Dark Current max. (nA)@VR=10V	V(BR)M Min. @IR=100μA Ee=0mW/cm ²
	Lens Color	Visible Light Fiber			
LTR-C930DB	Dark	Yes	2	30	30

SMD PTD

SMD PTD

Part No.	Description		Is min.(μA)@VR=0V Ee=1mW/cm ² λp=850nm	Dark Current max. (nA)@VR=10V	V(BR)M Min. @IR=100μA Ee=0mW/cm ²
	Lens Color	Visible Light Fiber			
LTR-S320C	Dark	Yes	0.2(Ee=0.5W/cm ²)	10	30