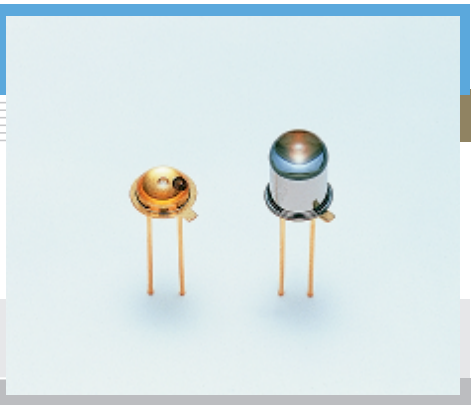
Infrared LED
L2656 series

High power GaAlAs infrared LED



Features

- High radiant output power
- High reliability

Applications

- Optical switch
- Automatic control system

■ Absolute maximum ratings (Ta=25 °C)

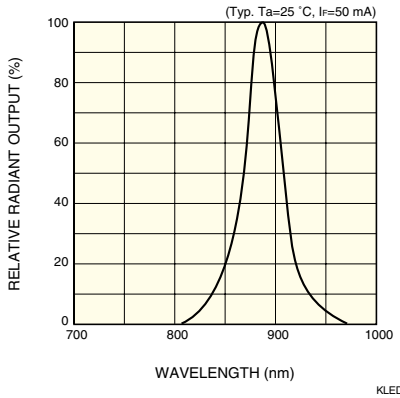
Parameter	Symbol	Condition	Value	Unit
Forward current	I_F		80	mA
Reverse voltage	V_R		5	V
Pulse forward current	I_{FP}	Pulse width=10 µs Duty ratio=1 %	1.0	A
Operating temperature	Topr		-30 to +85	°C
Storage temperature	Tstg		-40 to +100 *	°C

* Guaranteed to resist temperature cycle test of up to 5 cycles.

■ Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	L2656			L2656-03			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Peak emission wavelength	λp	I_F=50 mA	870	890	920	870	890	920	nm
Spectral half width	Δλ	I_F=50 mA	-	50	-	-	50	-	nm
Forward voltage	V_F	I_F=50 mA	-	1.45	1.6	-	1.45	1.6	V
Pulse forward voltage	V_{FP}	I_F=1 A	-	3.4	4.0	-	3.4	4.0	V
Reverse current	I_R	V_R=5 V	-	-	5	-	-	5	µA
Radiant flux	φe	I_F=50 mA	13	15	-	7.5	9	-	mW
Radiant illuminance	P_E	I_F=50 mA	-	1.7	-	-	4.4	-	mW/cm^2
Rise time	tr	I_F=50 mA, 10 to 90 %	-	0.45	0.7	-	0.45	0.7	µs
Fall time	tf	I_F=50 mA, 90 to 10 %	-	0.45	0.7	-	0.45	0.7	µs

■ Emission spectrum



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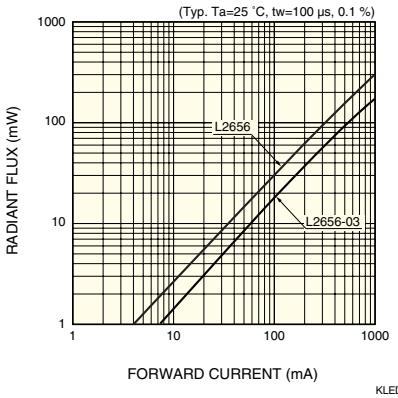
■ Radiant flux vs. forward current



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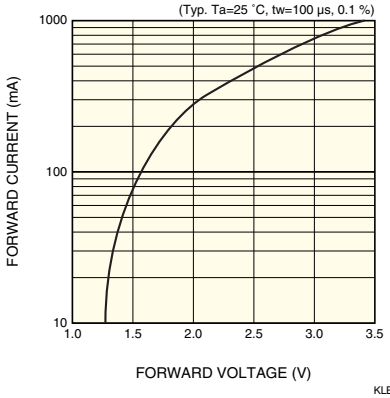
■ Forward current vs. forward voltage



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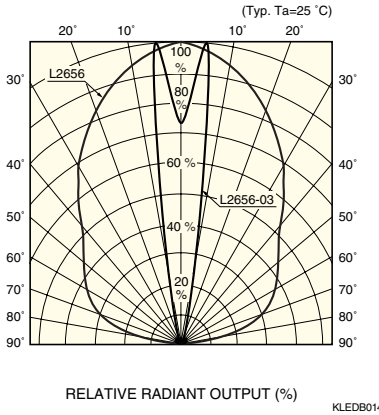
■ Directivity



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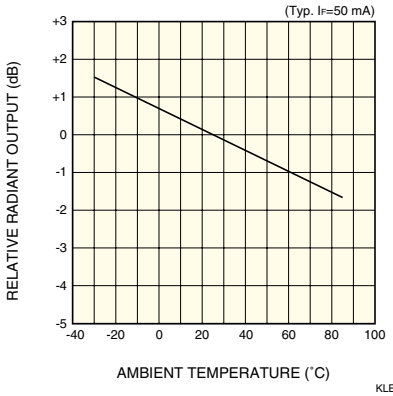
■ Radiant output vs. ambient temperature



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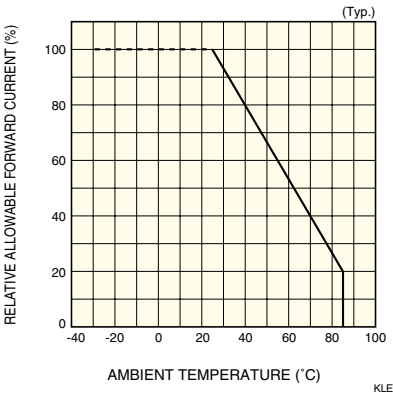
■ Allowable forward current vs. ambient temperature



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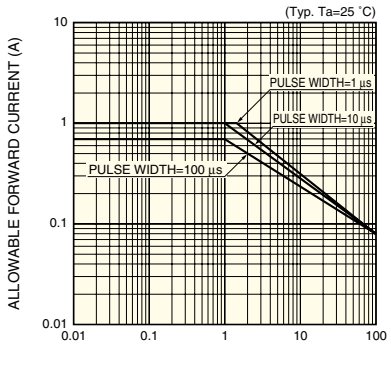
■ Allowable forward current vs. duty ratio



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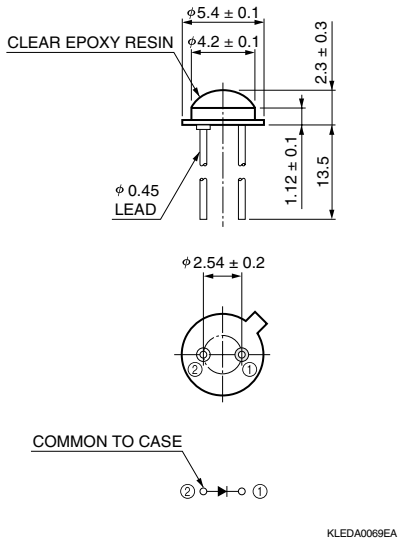
■ Dimensional outlines (unit: mm)

L2656



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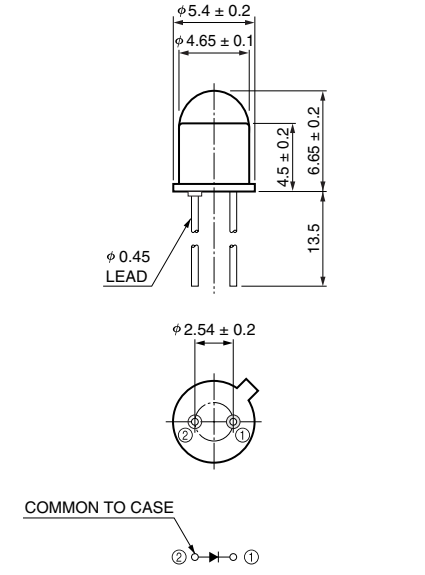
L2656-03



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