

L2388 series

TO-46 type GaAs infrared LED

Features

- High radiant output power
- High reliability

Applications

- Optical switches
- Automatic control systems

Absolute maximum ratings (Ta=25 °C)

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

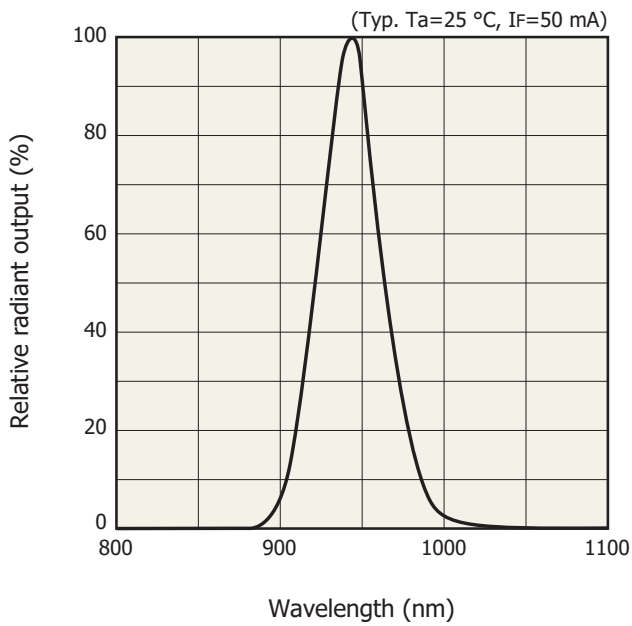
* The L2388 is guaranteed to resist temperature cycle test of up to 5 cycles.

Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

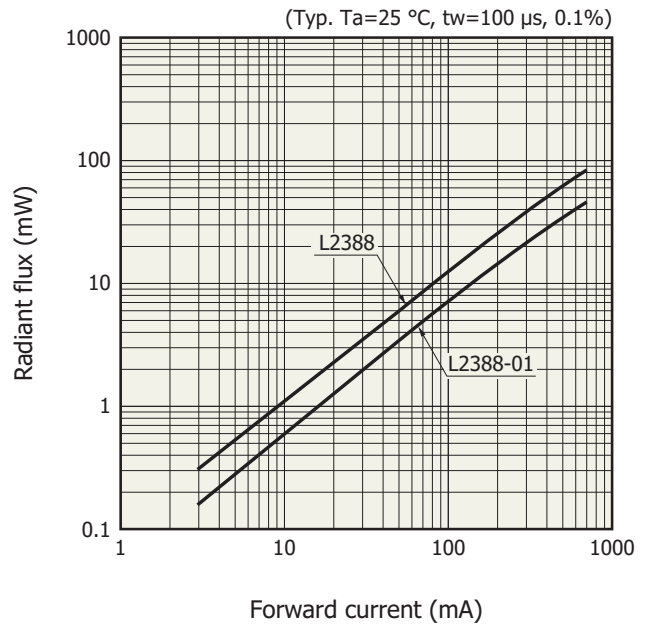
Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	L2388			L2388-01			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Peak emission wavelength	λp	IF=50 mA	920	945	970	920	945	970	nm
Spectral half width	Δλ	IF=50 mA	-	45	-	-	45	-	nm
Forward voltage	VF	IF=50 mA	-	1.3	1.4	-	1.3	1.4	V
Pulse forward voltage	VFP	IF=1.0 A	-	2.3	2.9	-	2.3	2.9	V
Reverse current	IR	VR=5 V	-	-	5	-	-	5	μA
Radiant flux	φe	IF=50 mA	4.5	6.0	-	2.6	3.4	-	mW
Radiant illuminance	PE	IF=50 mA	-	0.6	-	-	1.4	-	mW/cm ²
Rise time	tr	IF=50 mA, 10 to 90%	-	1.2	2.0	-	1.2	2.0	μs
Fall time	tf	IF=50 mA, 90 to 10%	-	1.3	2.0	-	1.3	2.0	μs

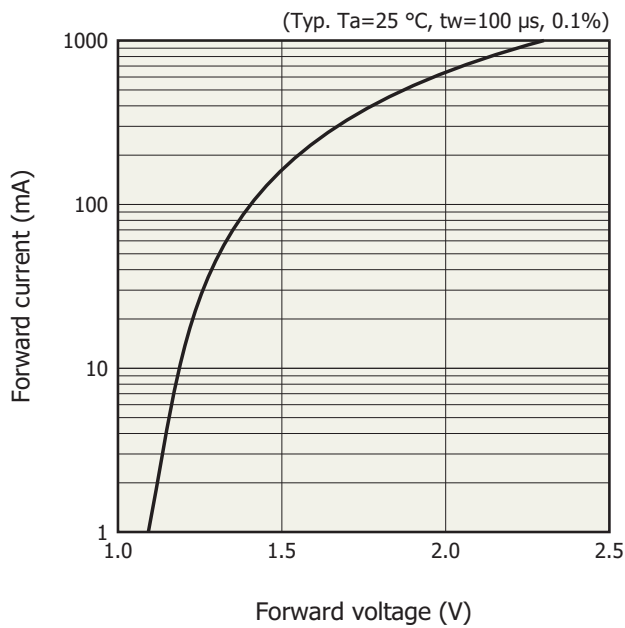
Emission spectrum



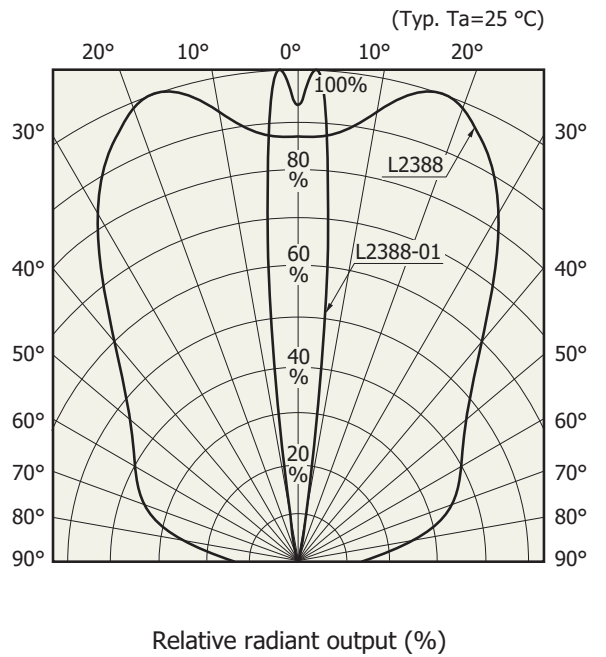
Radiant flux vs. forward current



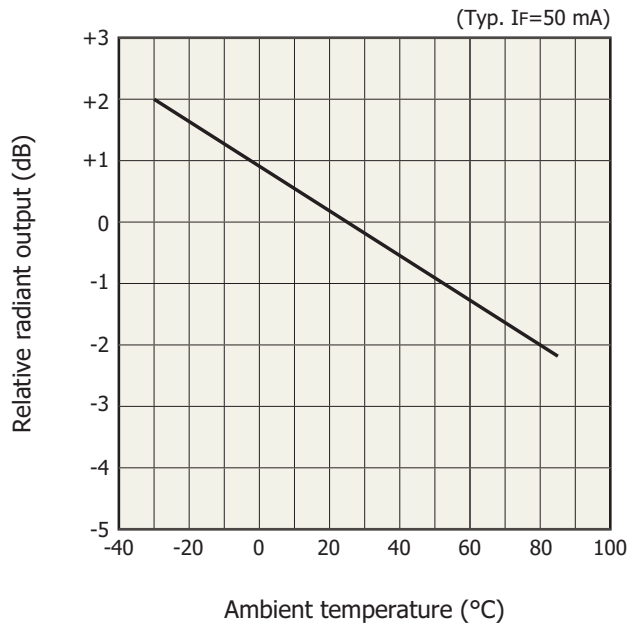
Forward current vs. forward voltage



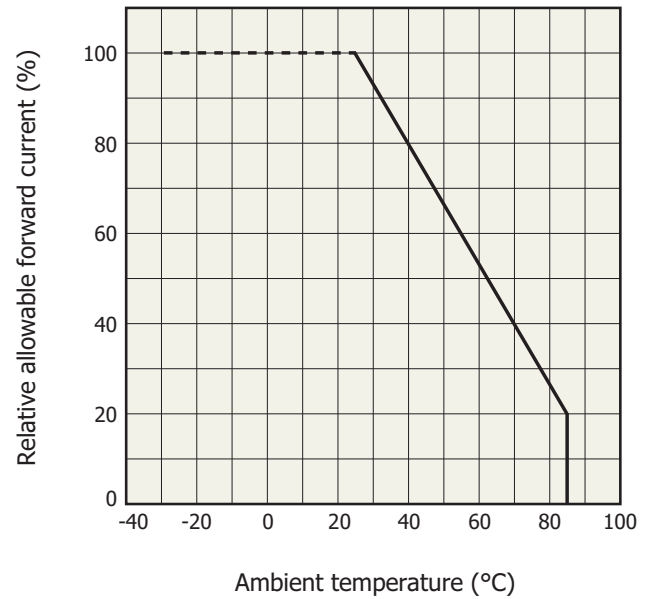
Directivity



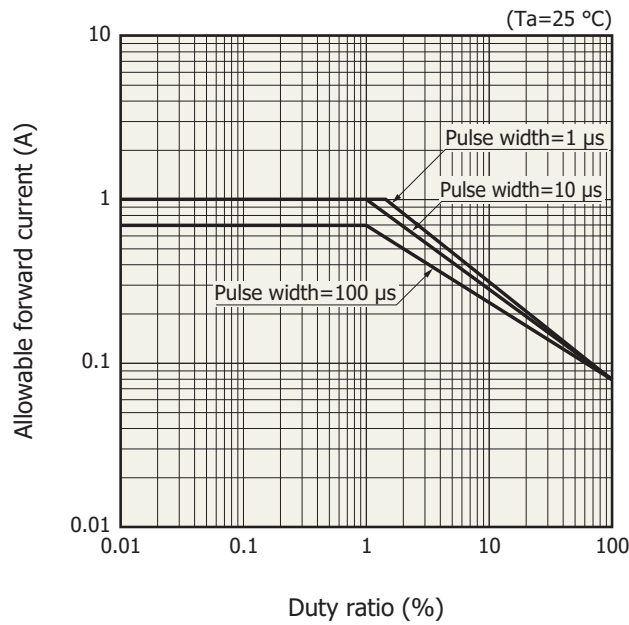
❑ Radiant output vs. ambient temperature



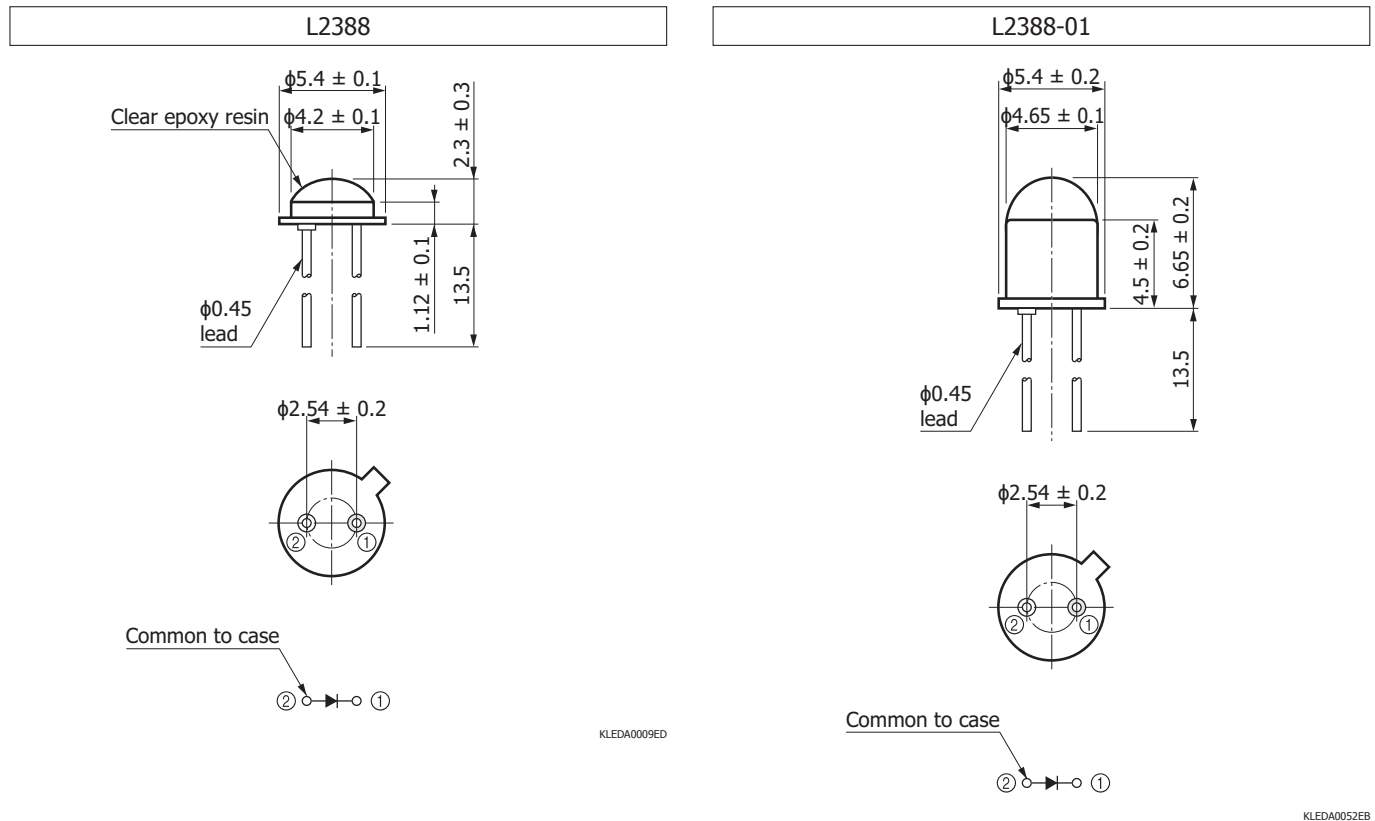
❑ Allowable forward current vs. ambient temperature



❑ Allowable forward current vs. duty ratio



Dimensional outlines (unit: mm)



Related information

www.hamamatsu.com/sp/ssd/doc_en.html

Precautions

- Disclaimer
- Metal, ceramic, plastic products

Information described in this material is current as of November, 2015.

Product specifications are subject to change without prior notice due to improvements or other reasons. This document has been carefully prepared and the information contained is believed to be accurate. In rare cases, however, there may be inaccuracies such as text errors. Before using these products, always contact us for the delivery specification sheet to check the latest specifications.

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