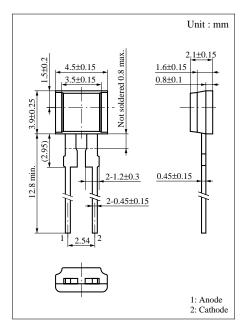
LNA2603F (LN155) GaAs Infrared Light Emitting Diode

For optical control systems

Features

- High-power output, high-efficiency : $P_0 = 6 \text{ mW}$ (typ.)
- Emitted light spectrum suited for silicon photodetectors : $\lambda_P = 940 \text{ nm} (typ.)$
- Long lifetime, high reliability
- Thin side-view type package



	0		
Parameter	Symbol	Ratings	Unit
Power dissipation	P _D	160	mW
Forward current (DC)	I _F	100	mA
Pulse forward current	I_{FP}^{*}	1.5	А
Reverse voltage (DC)	V _R	3	V
Operating ambient temperature	T _{opr}	-25 to +85	°C
Storage temperature	T _{stg}	- 40 to +100	°C
*			

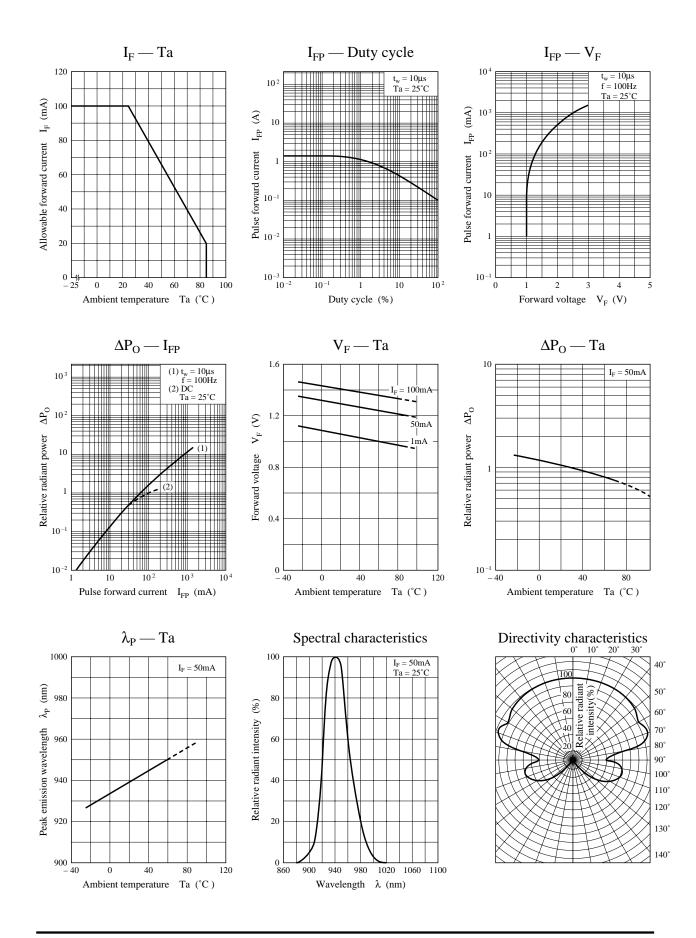
Absolute Maximum Ratings ($Ta = 25^{\circ}C$)

* f = 100 Hz, Duty cycle = 0.1 %

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	Po	$I_F = 50 mA$	3	6		mW
Peak emission wavelength	$\lambda_{\rm P}$	$I_F = 50 mA$		940		nm
Spectral half band width	Δλ	$I_F = 50 mA$		50		nm
Forward voltage (DC)	V _F	$I_F = 100 \text{mA}$		1.3	1.6	V
Reverse current (DC)	I _R	$V_R = 3V$			10	μA
Capacitance between pins	Ct	$V_R = 0V$, $f = 1MHz$		45		pF
Rise time	t _r	$I_{FP} = 100 \text{mA}$		1		μs
Fall time	t _f			1		μs
Half-power angle	θ	The angle in which radiant intencity is 50%		80		deg.

Electro-Optical Characteristics ($Ta = 25^{\circ}C$)

Note) The part number in the parenthesis shows conventional part number.



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▲ Caution for Safety



Gallium arsenide material (GaAs) is used in this product.

Therefore, do not burn, destroy, cut, crush, or chemically decompose the product, since gallium arsenide material in powder or vapor form is harmful to human health.

Observe the relevant laws and regulations when disposing of the products. Do not mix them with ordinary industrial waste or household refuse when disposing of GaAs-containing products.

Request for your special attention and precautions in using the technical information and semiconductors described in this material

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- (3) The products described in this material are intended to be used for standard applications or general electronic equipment (such as office equipment, communications equipment, measuring instruments and household appliances).

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- Special applications (such as for airplanes, aerospace, automobiles, traffic control equipment, combustion equipment, life support systems and safety devices) in which exceptional quality and reliability are required, or if the failure or malfunction of the products may directly jeopardize life or harm the human body.
- Any applications other than the standard applications intended.
- (4) The products and product specifications described in this material are subject to change without notice for reasons of modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements.
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Even when the products are used within the guaranteed values, redundant design is recommended, so that such equipment may not violate relevant laws or regulations because of the function of our products.

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