

LNA2603F (LN155)

GaAs Infrared Light Emitting Diode

For optical control systems

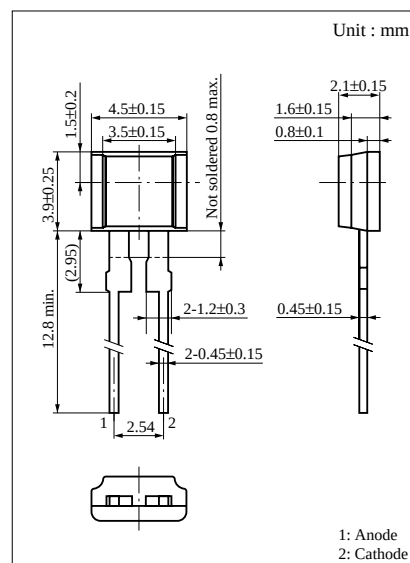
Features

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

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

Parameter	Symbol	Ratings	Unit
Power dissipation	P_D	160	mW
Forward current (DC)	I_F	100	mA
Pulse forward current	I_{FP}^*	1.5	A
Reverse voltage (DC)	V_R	3	V
Operating ambient temperature	T_{opr}	$-25 \text{ to } +85$	$^\circ\text{C}$
Storage temperature	T_{stg}	$-40 \text{ to } +100$	$^\circ\text{C}$

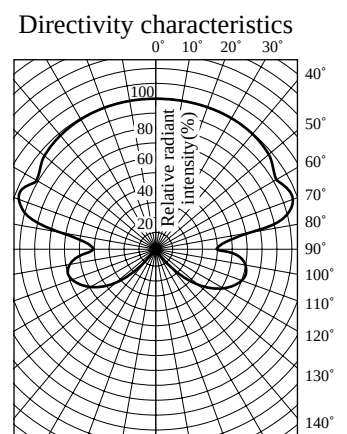
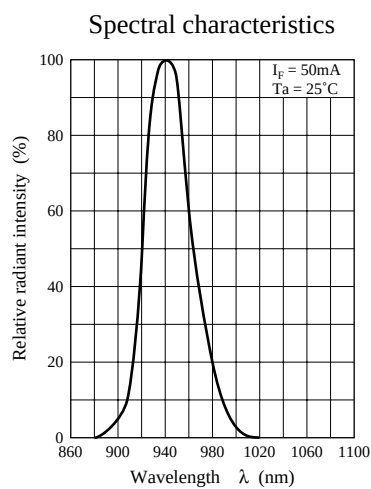
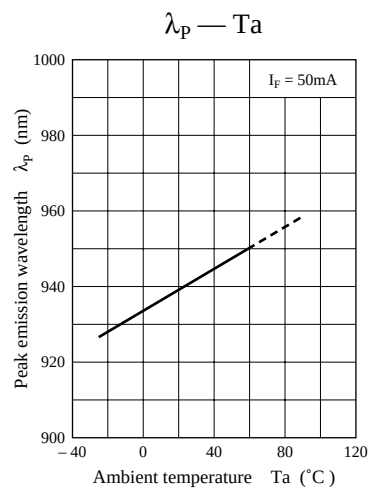
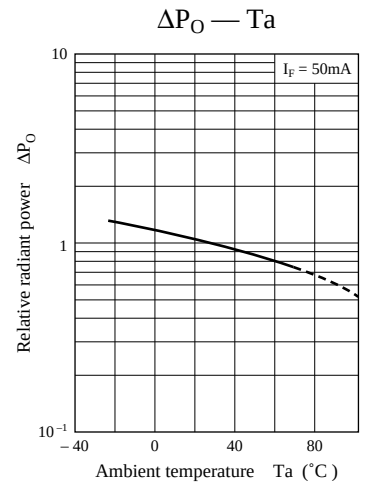
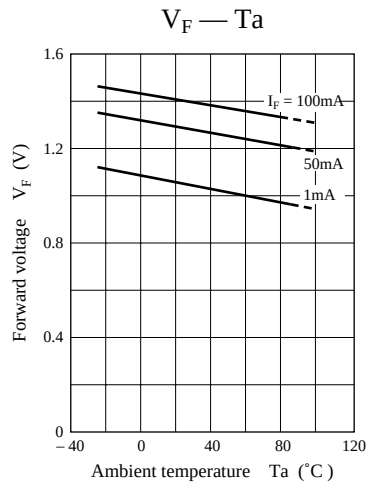
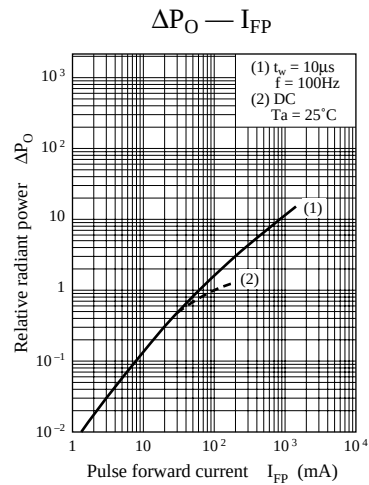
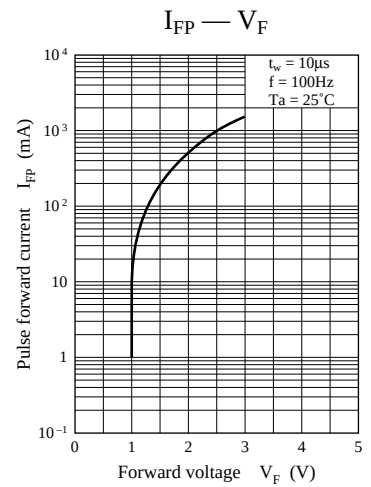
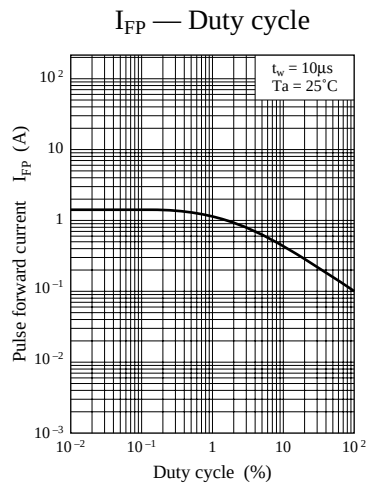
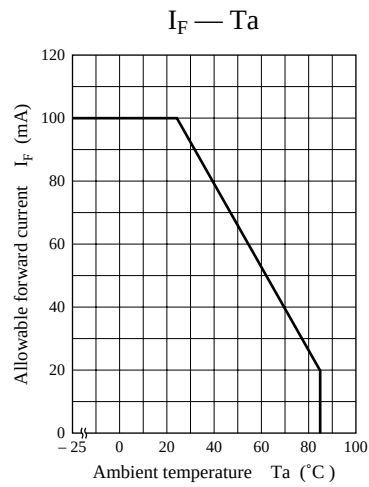
* $f = 100 \text{ Hz}$, Duty cycle = 0.1 %



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

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	P_O	$I_F = 50\text{mA}$	3	6		mW
Peak emission wavelength	λ_p	$I_F = 50\text{mA}$		940		nm
Spectral half band width	$\Delta\lambda$	$I_F = 50\text{mA}$		50		nm
Forward voltage (DC)	V_F	$I_F = 100\text{mA}$		1.3	1.6	V
Reverse current (DC)	I_R	$V_R = 3\text{V}$			10	μA
Capacitance between pins	C_t	$V_R = 0\text{V}$, $f = 1\text{MHz}$		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 intensity is 50%		80		deg.

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



Caution for Safety

 **DANGER**

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.

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