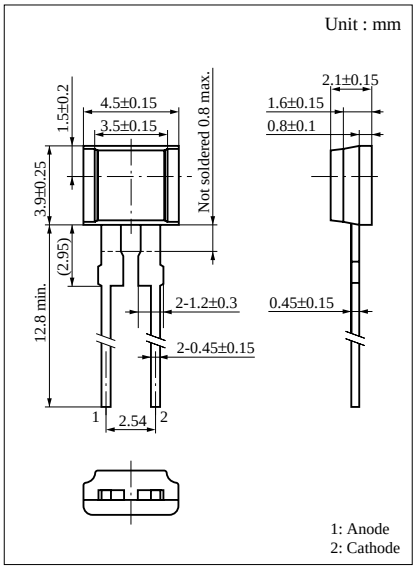
LNA2603F (LN155)

GaAs Infrared Light Emitting Diode

For optical control systems



Features

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

Absolute Maximum Ratings (Ta = 25˚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 to +85	˚C
Storage temperature	T_{stg}	– 40 to +100	˚C

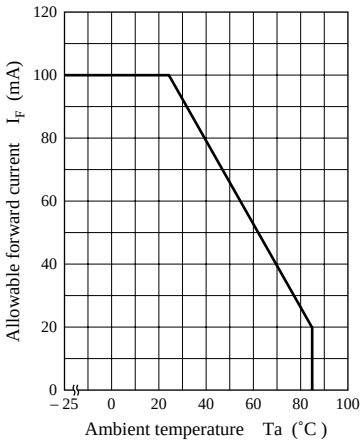
* f = 100 Hz, Duty cycle = 0.1 %

Electro-Optical Characteristics (Ta = 25˚C)

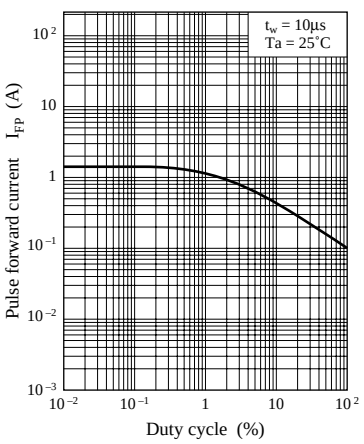
Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	P_O	I_F = 50mA	3	6		mW
Peak emission wavelength	λ_P	I_F = 50mA		940		nm
Spectral half band width	$\Delta\lambda$	I_F = 50mA		50		nm
Forward voltage (DC)	V_F	I_F = 100mA		1.3	1.6	V
Reverse current (DC)	I_R	V_R = 3V			10	µA
Capacitance between pins	C_t	V_R = 0V, f = 1MHz		45		pF
Rise time	t_r	I_{FP} = 100mA		1		µs
Fall time	t_f			1		µs
Half-power angle	θ	The angle in which radiant intencity is 50%		80		deg.

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

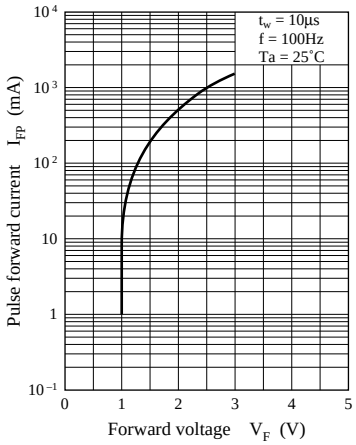
I_F — Ta



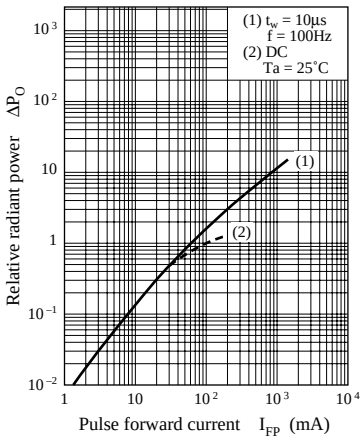
I_{FP} — Duty cycle



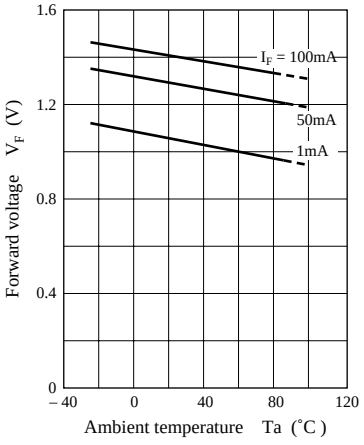
I_{FP} — V_F



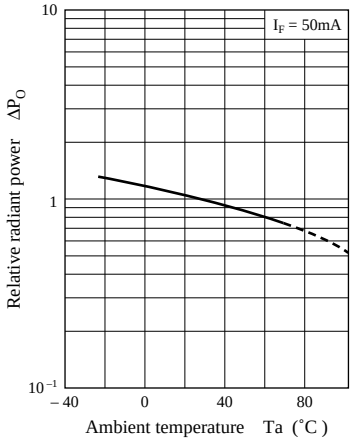
ΔP_O — I_{FP}



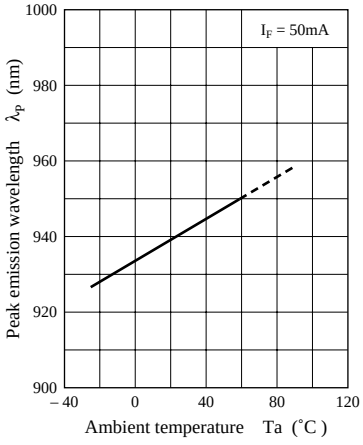
V_F — Ta



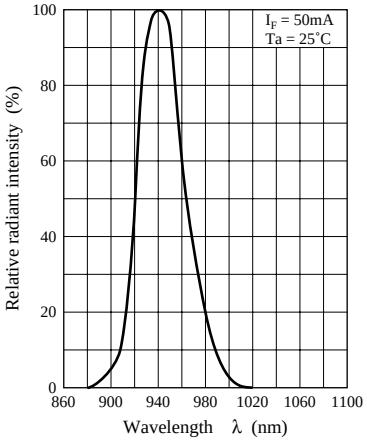
ΔP_O — Ta



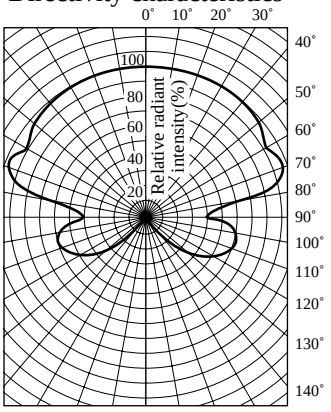
λ_P — Ta



Spectral characteristics



Directivity characteristics



⚠ 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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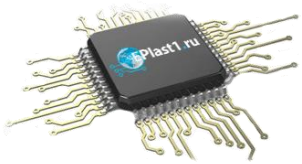
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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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