



■ INFRARED LED

DNP319



■ Absolute Maximum Rating

Ta = 25°C

Part No.	Material	Power Dissipation Pd	Forward Current IF	Derating ^{※1} ΔIFM	Peak Forward Current ^{※2} IFM	Reverse Voltage VR	Operating Temperature Topr	Storage Temperature Tstg
DNP319	GaAlAs	150	100	1.33	1,000	5	-30 ~ +85	-30 ~ +100
Units		mW	mA	mA/°C	mA	V	°C	°C

※1 The current derating for operation applies when temperature is above 25°C.

※2 IFM Condition : tw ≤ 100μs, Duty ≤ 1/100

■ Electro-Optical Characteristics

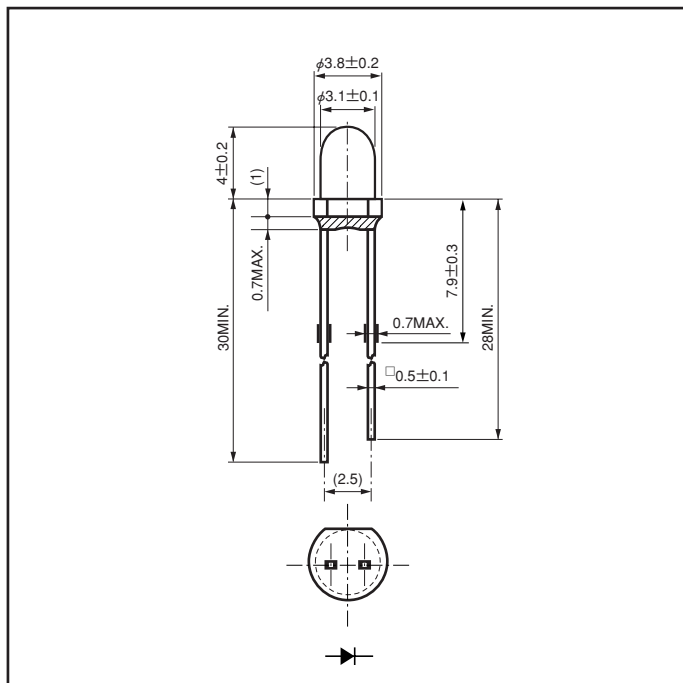
Ta = 25°C

Part No.	Forward Voltage VF			Reverse Current IR		Axial Radiant Intensity IE			Total Power Po		Wavelength			Cut-off Frequency ^{※3} fc			Response Time tr·tf	
	TYP	MAX	IF	MAX	VR	MIN	TYP	IF	TYP	IF	λp	Δλ	IF	MIN	TYP	IF	TYP	IF
DNP319	1.4	1.6	50	100	5	20	40	50	14	50	880	40	50	—	12	50	30	50
Units	V	V	mA	μA	V	mW/sr	mW/sr	mA	mW	mA	nm	nm	mA	MHz	MHz	mA	ns	mA

※3 fc Condition : IF=50mA, Δf=±5mA, -3dB from 0.1MHz

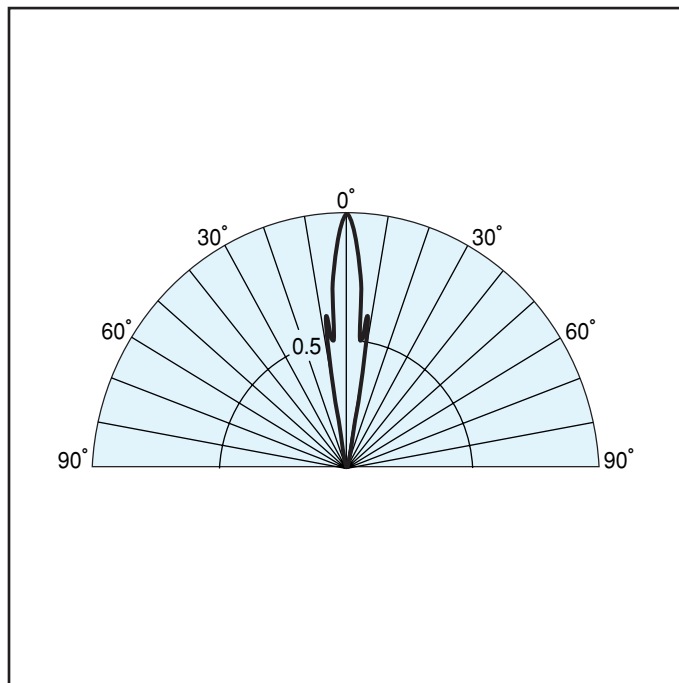
■ Package Dimensions

Unit : mm

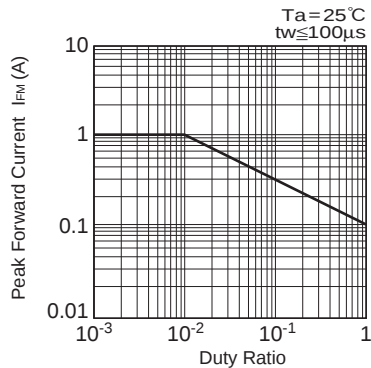


■ Spatial Distribution

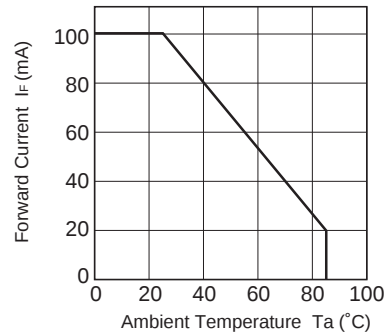
Ta = 25°C



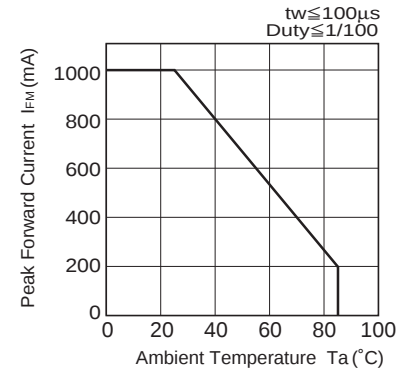
■ Peak Forward Current vs. Duty Ratio



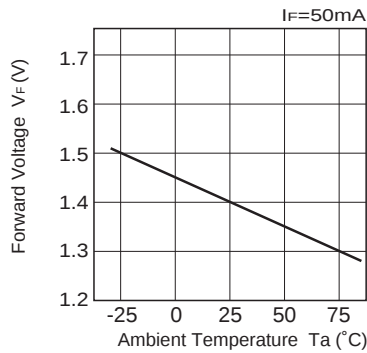
■ Ambient Temperature vs. Forward Current



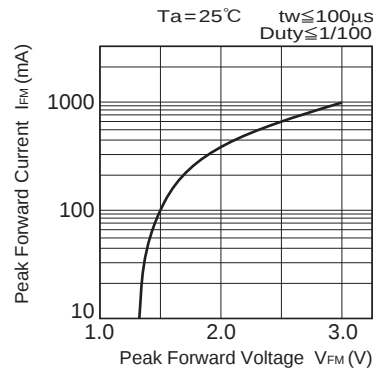
■ Ambient Temperature vs. Peak Forward Current



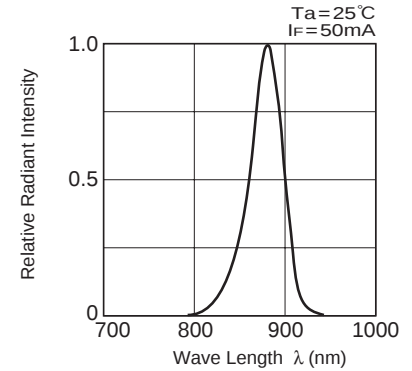
■ Ambient Temperature vs. Forward Voltage



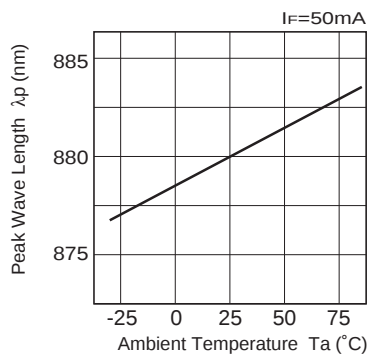
■ Peak Forward Current vs. Peak Forward Voltage



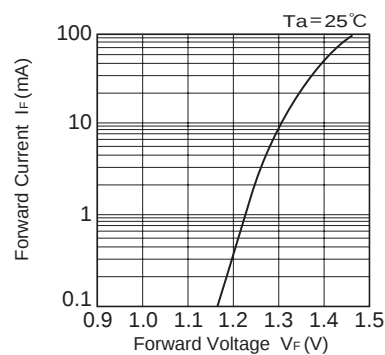
■ Spectral Distribution



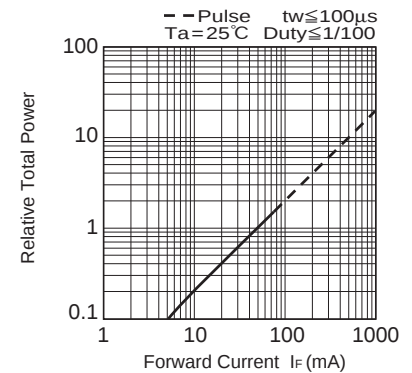
■ Ambient Temperature vs. Peak Wave Length



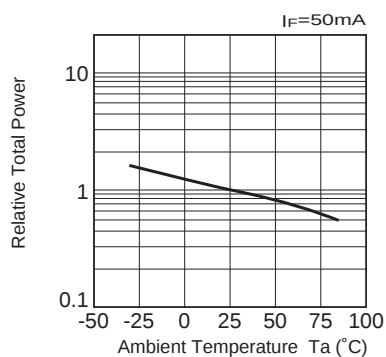
■ Forward Current vs. Forward Voltage



■ Forward Current vs. Relative Total Power



■ Ambient Temperature vs. Relative Total Power



■ Frequency

