ϕ3mm ceramic type
Model No. ALC880L-3A

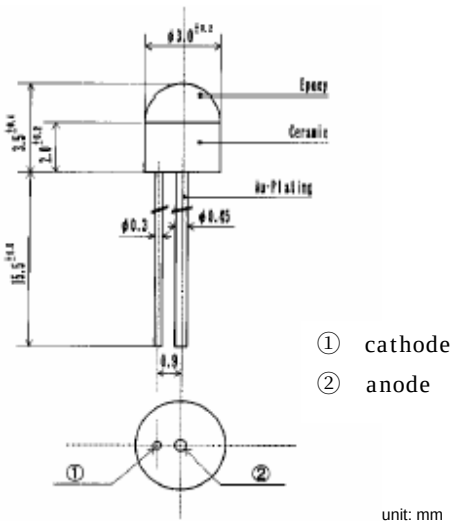
Infrared LED

◆ Features

High-output power
Small and compact
High Reliability

◆ Applications

Optical switches
Optical sensors



◆ Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Value	Unit
Forward Current (DC)	I_F	50	mA
Pulse Forward Current *1	I_{FP}	0.5	A
Reverse Voltage (DC)	V_R	5	V
Power Dissipation	P_D	100	mW
Operating Temperature	Topr	-20 ~ +85	℃
Storage Temperature	Tstg	-30 ~ +100	℃
Junction Temperature	Tj	100	℃
Lead Soldering Temperature *2	Tsol	260	℃

*1 : Tw=10μs, T=10mS *2 : within 5sec / up to 3.0mm from the body

◆ Electro-optical Characteristics (Ta = 25℃)

Parameter	Symbol	MIN	TYP	MAX	Unit	Conditions
Output Power	P_O	--	4.5	--	mW	I_F = 20mA
Forward Voltage	V_F	--	1.3	1.6	V	I_F = 20mA
Reverse Current	I_R	--	--	10	μA	V_R = 5V
Peak Wavelength	λ_p	--	880	--	nm	I_F = 20mA
Spectral Half width	$\Delta\lambda$	--	60	--	nm	I_F = 20mA
Viewing Half Angle	θ	--	±80	--	deg.	I_F = 20mA
Junction Capacitance	Cj	--	15	--	pF	1MHz, V=0V
Temp. Coefficient of P_O	P/T	--	-0.5	--	%/℃	I_F = 10mA
Temp. Coefficient of V_F	V/T	--	-1.5	--	mV/℃	I_F = 10mA
Rise Time	Tr	--	1.5	--	μS	I_{FP} = 50mA
Fall Time	Tf	--	0.8	--	μS	I_{FP} = 50mA

ϕ3mm ceramic type

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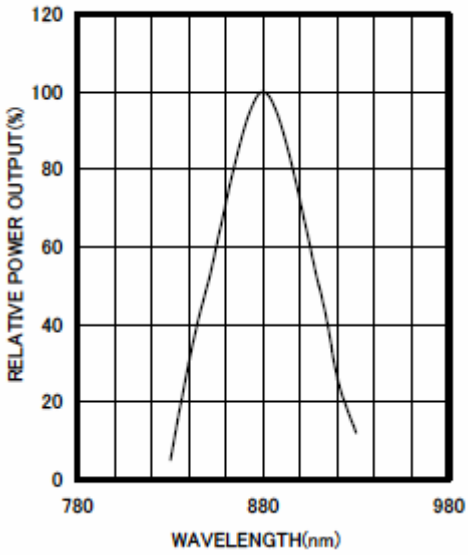
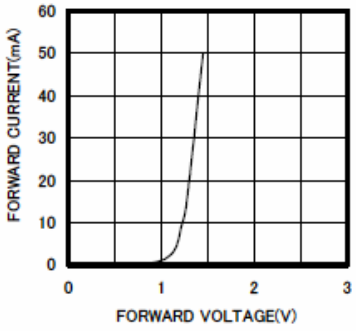
Infrared LED

◆ Characteristics Data

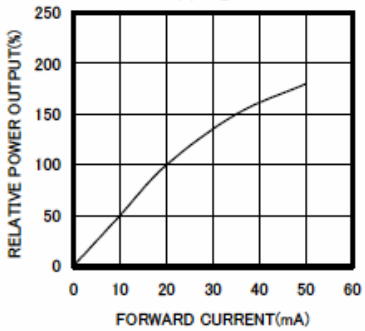
SPECTRAL OUTPUT



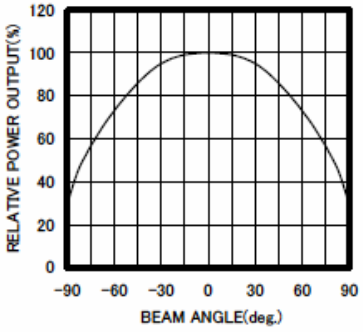
FORWARD I-V CHARACTERISTICS



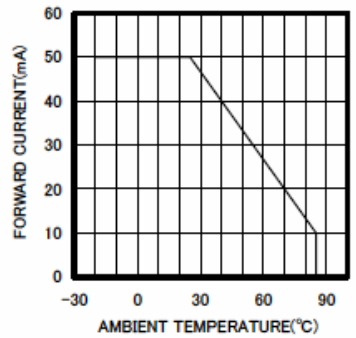
RELATIVE POWER vs FORWARD CURRENT



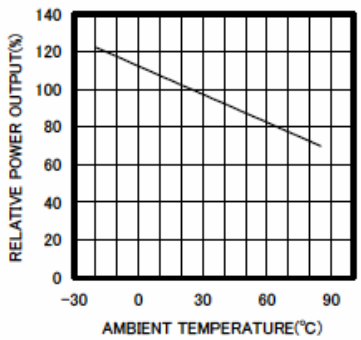
RADIATION PATTERN



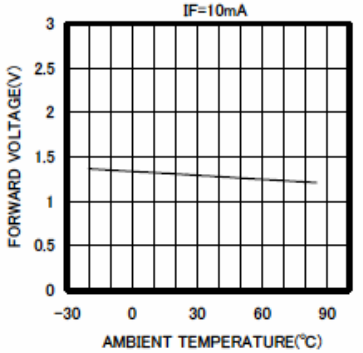
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA



The data is subject to change without notice.