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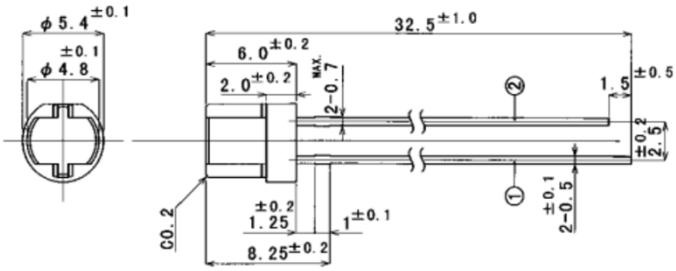
Data sheet

Red LED — EOLD-660-592

Rev. 03, 2017

Radiation	Type	Case
Deep red	AlGaAs	5 mm flat plastic



Description:

- High output power
- Wide beam angle
- For fiber optical communications, optical sensors, bar code readers and edge sensing (coin dispenser)

1 - Anode, 2 -Cathode

Maximum Ratings

T_{amb}= 25°C, unless otherwise specified

Parameter	Test Conditions	Symbol	Value	Unit
Continous forward current		I_F	50	mA
Peak forward current	t=10 µs, T=10 ms	I_{FP}	0.5	A
Reverse voltage		V_R	5	V
Power dissipation		P_D	110	mW
Operating temperature range		T_{amb}	-20 to +80	°C
Storage temperature range		T_{stg}	-30 to +85	°C
Junction temperature		T_J	100	°C
Lead soldering temperature	t=5 s, 3 mm from case	T_{slg}	260	°C

Optical and Electrical Characteristics

T_{amb}= 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Radiant power	Φ_e	I_F= 20 mA		5		mW
Radiant intensity	I_e	I_F= 20 mA		4.7		mW/sr
Luminous intensity	I_V	I_F= 20 mA		130		mcd
Forward voltage	V_F	I_F= 20 mA		1.8	2.2	V
Reverse current	I_R	V_R= 5 V			100	µA
Peak wavelength	λ_p	I_F= 20 mA		660		nm
FWHM	$\Delta\lambda_{0.5}$	I_F= 20 mA		25		nm
Viewing angle	φ	I_F= 20 mA		110 (±55)		deg.
Rise and fall time	t_r, t_f	I_{FP}= 20 mA		30		ns
Junction capacitance	C_j	1 MHz, V= 0 V		20		pF

RoHS COMPLIANT — Pb Pb-Free

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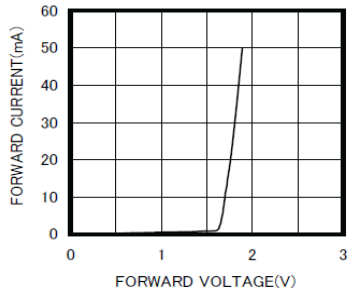
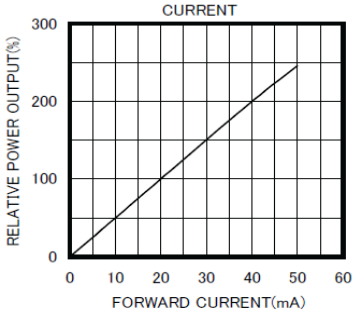
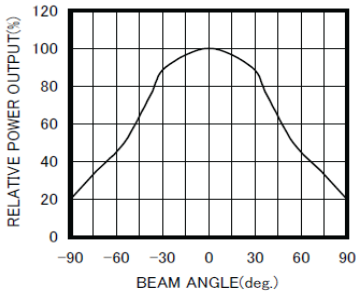
FORWARD I-V CHARACTERISTICS



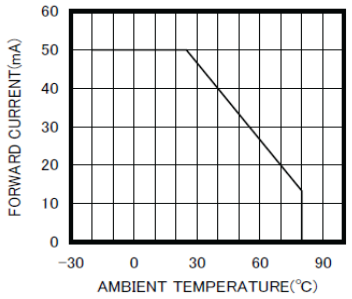
RELATIVE POWER vs FORWARD CURRENT



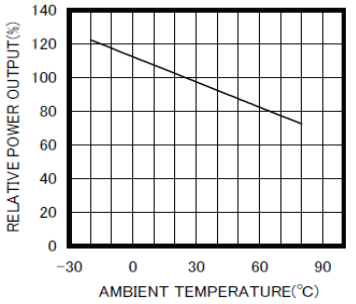
RADIATION PATTERN



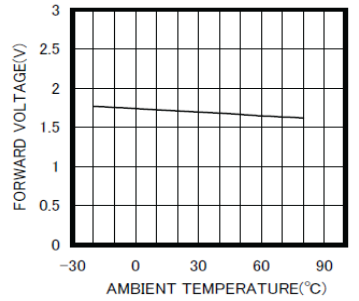
THERMAL DERATING CURVE



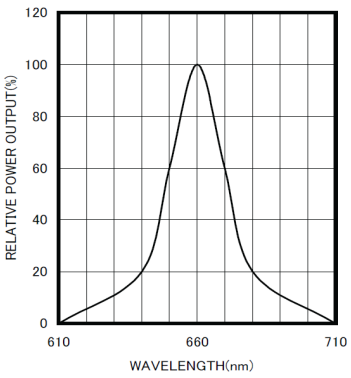
POWER OUTPUT vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA



SPECTRAL OUTPUT



Art. No. 132 014

RoHS COMPLIANT Pb-Free