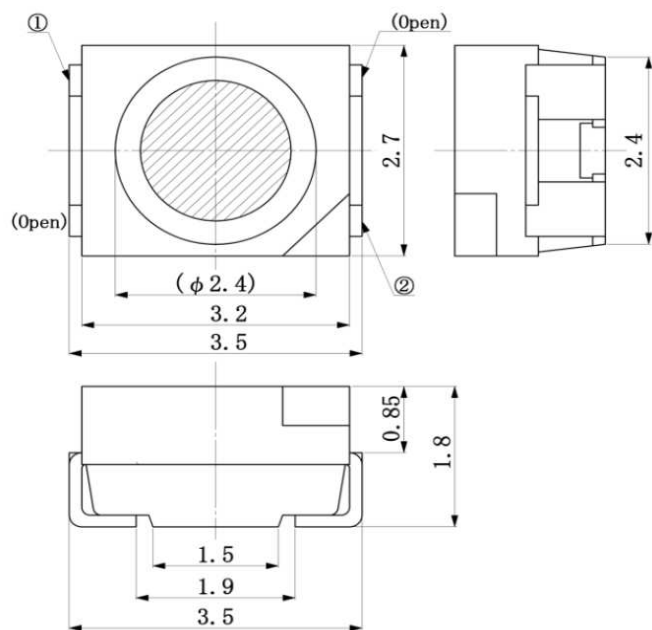


Peak Emission Wavelength: 1200nm



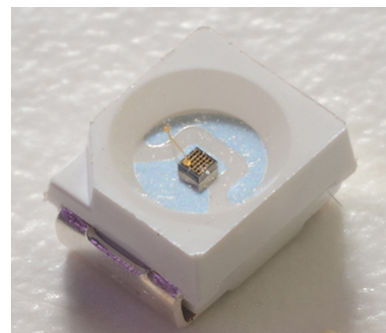
① Anode

② Cathode

Dimensions in mm

**Description**

- SMD 3527 (1411) Package
- Type: InGaAs/InP, MQW
- High power
- High speed
- High reliability



**Application**

- Optical switches
- Optical communication
- Safety equipment
- Automation

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

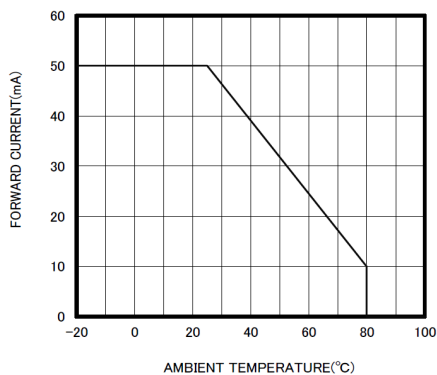


ITEMS	TEST CONDITIONS	SYMBOL	RATINGS	UNIT
Forward DC Current		$I_f$	50	mA
Forward Current (pulse)	$t=10\mu\text{s}$ , $T=10\text{ms}$	$I_f$	0.5	A
Reverse Voltage		$V_r$	5	V
Power Dissipation		$P_o$	120	mW
Operating Temperature Range		$T_{op}$	-20 to +80	$^\circ\text{C}$
Storage Temperature Range		$T_{st}$	-30 to +100	$^\circ\text{C}$
Lead Soldering Temperature	$t=5\text{sec}$ , 3mm from case	$T_{slg}$	260	$^\circ\text{C}$

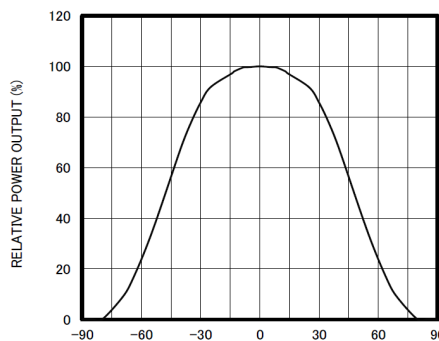
Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	Vf	If=20mA	--	0.9	1.1	V
Forward Voltage	Vf	If=50mA	--	1.0	1.2	V
Reverse Current	Ir	Vr=5V	--	--	100	uA
Output Power	Po	If=20mA	--	1.8	--	mW
Output Power	Po	If=50mA	--	3.5	--	mW
Peak Wavelength	$\lambda_p$	If=20mA	--	1200	--	nm
Spectral Bandwidth	$\Delta\lambda_{0.5}$	If=20mA	--	100	--	nm
Viewing Angle	$\Theta_{0.5}$	If=20mA	--	+/-45	--	deg
Switching Time	tr, tf	If=20mA	--	25, 40	--	ns

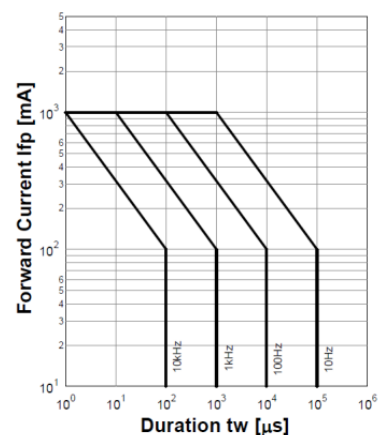
THERMAL DERATING CURVE



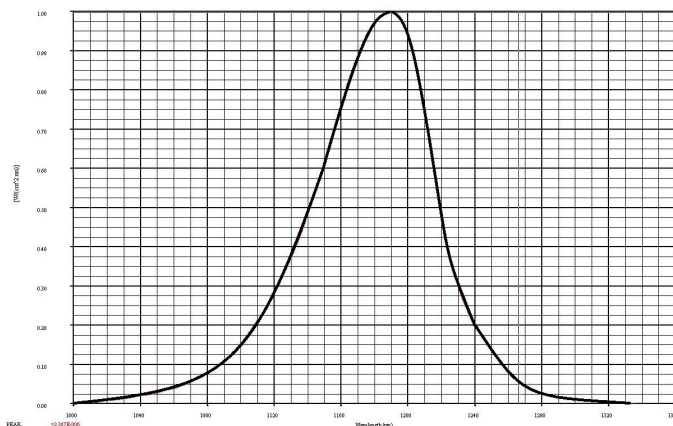
RADIATION PATTERN



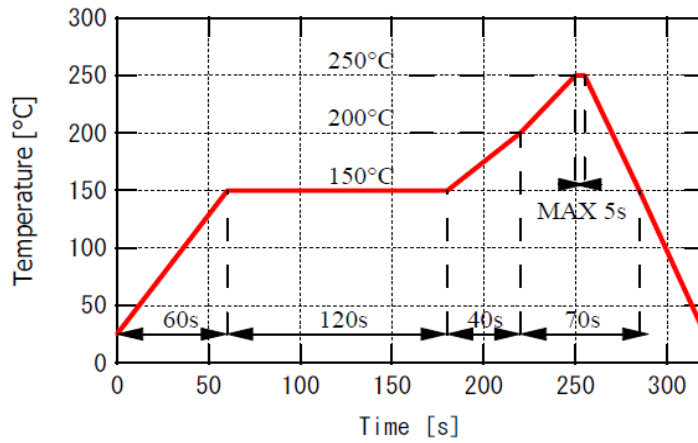
Forward Current - Pulse Duration



Spectral Response



Recommended reflow soldering profile



Recommended Land Layout (Unit: mm)

