

Features

- : 670nm wavelength range
- : Operating to over 50 °C
- : Low drive current and voltage
- : Flat window Type TO-46 Can Package
- : Back monitor Photo diode
- : High reliability
- : Other configurations available on request

Applications

- : Consumer Electronics
- : Position Sensors
- : Medical Instruments
- : Home Networking
- : Data Link Communication, IEEE1394b
- : Low power consumption application
such as battery-operated equipment

Description



Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 85 °C
Operating Temperature	-20 to 50 °C
Lead Solder Temperature	260 °C, 10 sec
Continuous Forward Current	8mA
Continuous Reverse Voltage	5V (@10µA)

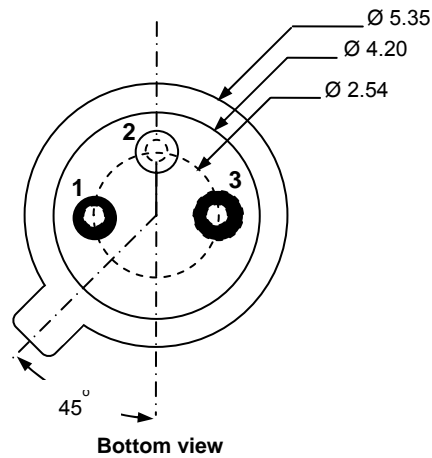
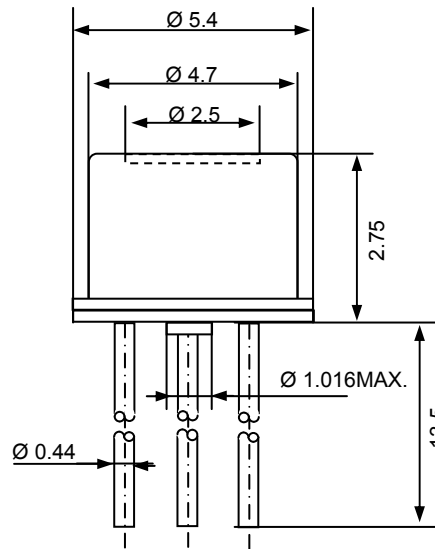
Part Number :

Description :

PM67-F1P1N-KC	670nm Flat window TO-46 Package, Common Cathode Type
PM67-F1P1N-AC	670nm Flat window TO-46 Package, Common Anode Type

Dimensions

Unit:mm



PINOUT

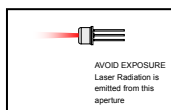
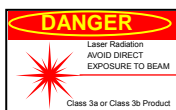
Number	PM67-F1P1N-KC	PM67-F1P1N-AC
1	LD Anode	LD Cathode
2	LD Cathode / PD Anode	LD Anode / PD Cathode
3	PD Cathode	PD Anode

Electro-Optics Characteristics (T_a=25°C unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions	
		Min.	Typ.	Max.			
Threshold Current	I _{th}		2	3.5	mA	CW	
Slope Efficiency	η	0.2	0.3		W/A	I _f = 5mA	
Optical Output Power	P _o		1.0		mW	I _f = 5mA	
Peak Wavelength	λ	660	670	690	nm	I _f = 5mA	
Spectral Bandwidth (RMS)	Δλ			0.85	nm	I _f = 5mA	
Beam Divergence	Θ	14		30	°	P ₀ =1.0mW, (Full Width, 1/e ²)	
Operating Voltage	V _f		2.1	2.5	V	I _f = 5mA	
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions	
Monitor Current	I _{PD}		30		μA	P ₀ =1.0mW	
Dark current	I _D			20	nA	P ₀ =0mW, V _R =3V	
PD Reverse Voltage	BVR _{PD}	30	115		V	P ₀ =0mW, I _R =10μA	
PD Capacitance	C				100	pF	V _R =0V, Freq=1MHz
					55		V _R =3V, Freq=1MHz

Notes

* These specifications are subject to change without notice



NOTICE

The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

DANGER

The VCSEL is a class IIIb laser and should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.