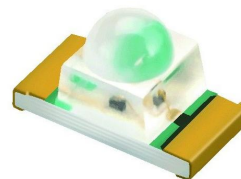


MIR-3216C-H19-L110-Z3



1206 Round Subminiature Package Phototransistor

Descriptions

MIR-3216C-H19-L110-Z3 is an infrared emitting diode in miniature SMD package which is molded in a water clear plastic with spherical top view lens. The device is spectrally matched with silicon photodiode and phototransistor.

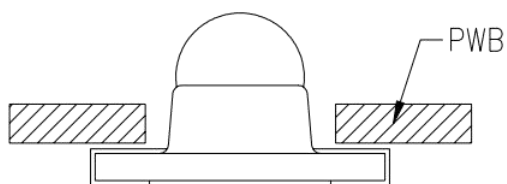
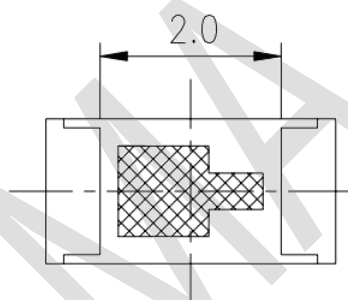
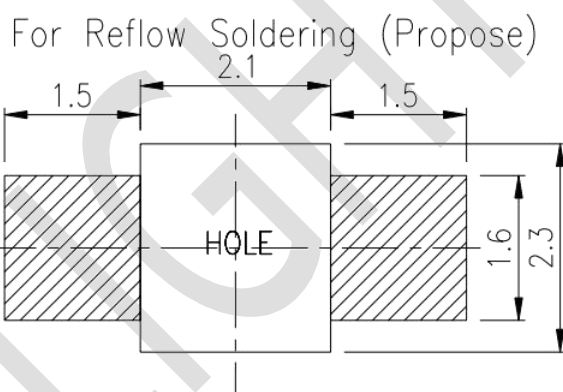
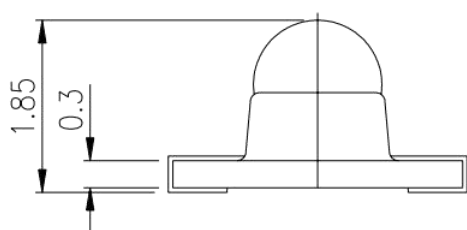
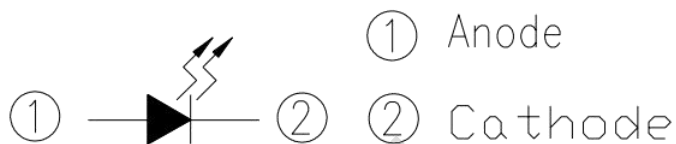
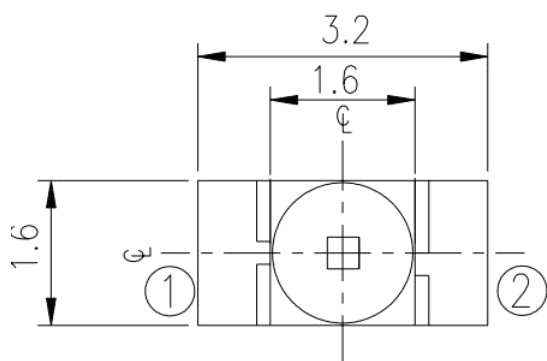
Features

- Small double-end package
- Low forward voltage
- Good spectral matching to Si photo detector
- Package in 8mm tape on 7 diameter reel.
- Pb free
- The product itself will remain within RoHS comp

Applications

- Mouse
- Optoelectronic switch
- Copiers
- Scanners
- Amusement machines

Package Dimension



Reverse SMT

Notes:

- 1.All dimensions are in millimeters
 - 2.Tolerances unless dimensions $\pm 0.1\text{mm}$
 - 3.Suggested pad dimension is just for reference only
- Please modify the pad dimension based on individual need

Absolute Maximum Ratings

Parameter (Ta=25°C)	Symbol	Ratings	Unit
Power Dissipation at(or below) 25 Free Air Temperature	Pd	130	mW
Reverse Voltage	V _R	5	V
Forward Current	I _F	65	mA
Peak Forward Current Pulse width ≤ 100μs,Duty cycle= 1%	I _{FP}	1	A
Operating Temperature	T _{opr}	-40~+85	°C
Storage Temperature	T _{stg}	-40~+100	°C
Power Dissipation at (or below) 25 Free Air Temperature (Soldering time 5 seconds)	T _{sol}	260	°C

Electro-Optical Characteristics

Paramete (Ta=25°C)	Symbol	Condition	Min.	Typ.	Max.	Units
Radiant Intensity	E _e	I _F =20mA	1.0	3.0	--	mW/sr
Radiant Intensity	E _e	I _F =100mA		22		mW/sr
Peak Wavelength	λ _p	I _F =20mA	--	940	--	nm
Spectral Bandwidth	Δλ	I _F =20mA	--	45	--	nm
Forward Voltage	V _F	I _F =20mA	--	1.2	1.5	V
Reverse Current	I _R	V _R =5V	--	--	10	μA
View Angle	2θ1/2	I _F =20mA	--	20	--	deg

Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs.
Ambient Temperature

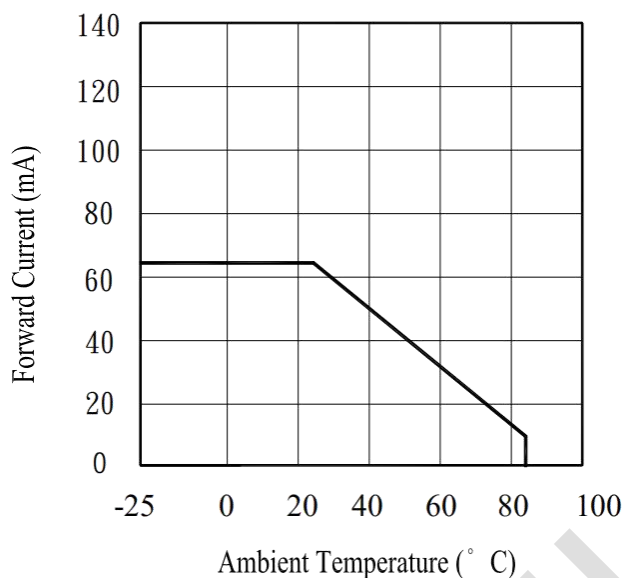


Fig.2 Spectral Distribution

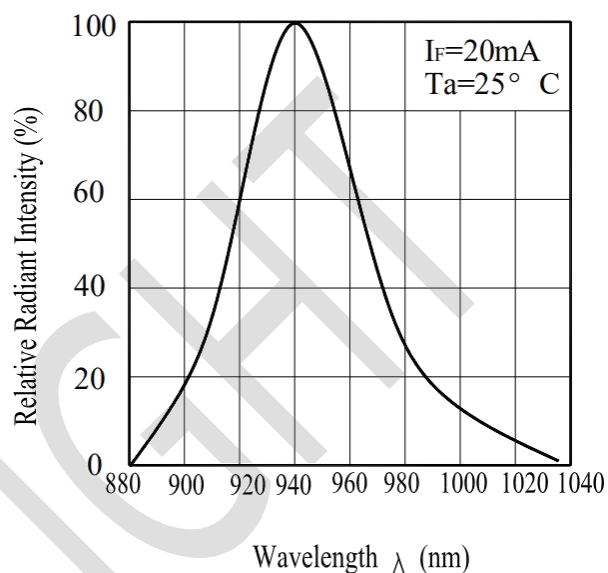


Fig.3 Peak Emission Wavelength
Ambient Temperature

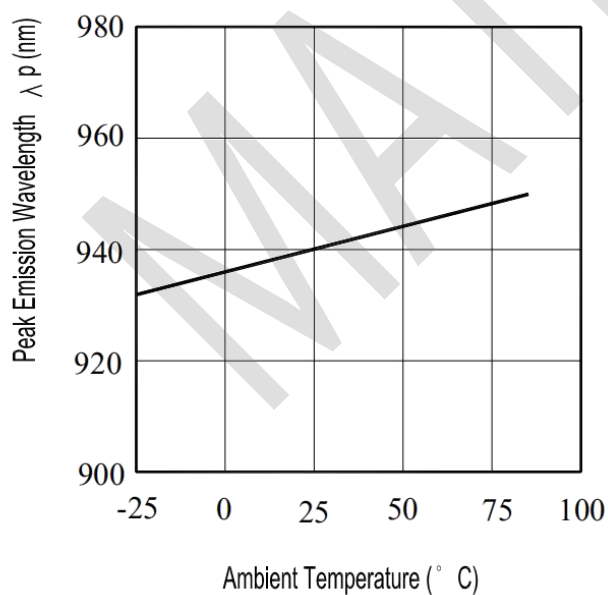


Fig.4 Forward Current
vs. Forward Voltage

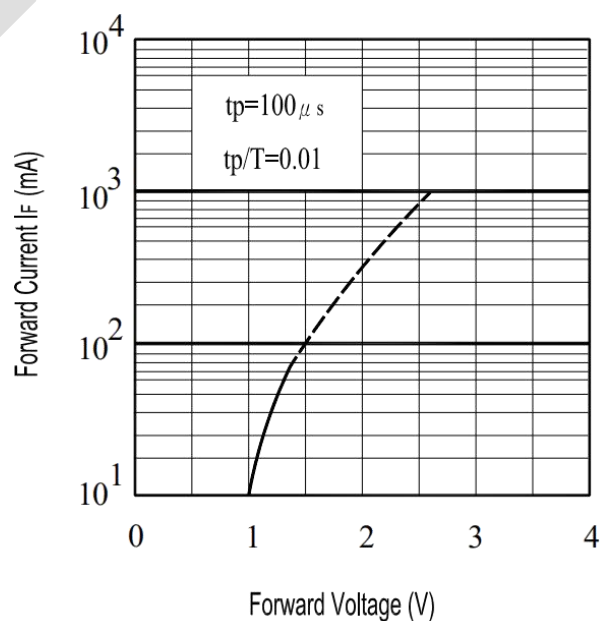


Fig.5 Relative Intensity vs.
Forward Current

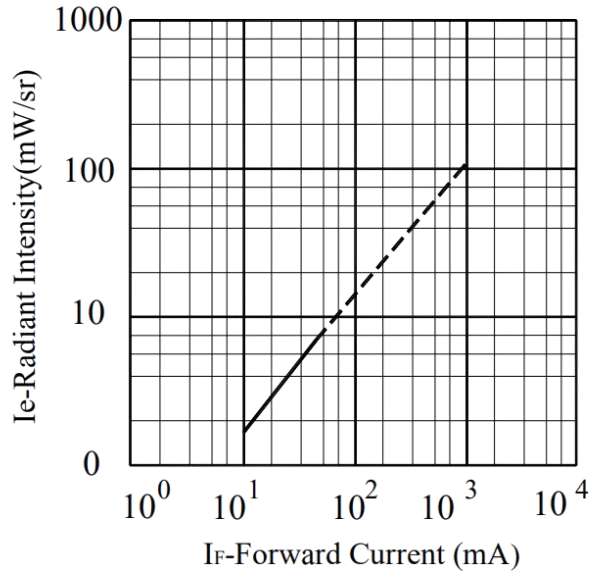


Fig.6 Relative Radiant Intensity vs.
Angular Displacement

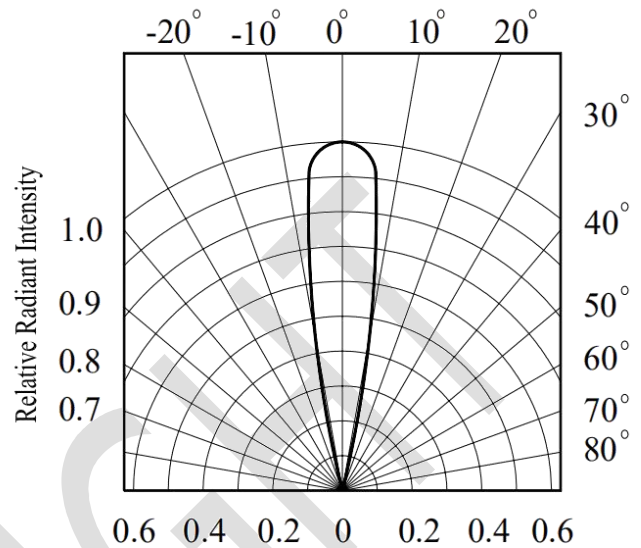


Fig.7 Relative Intensity vs.
Ambient Temperature(°C)

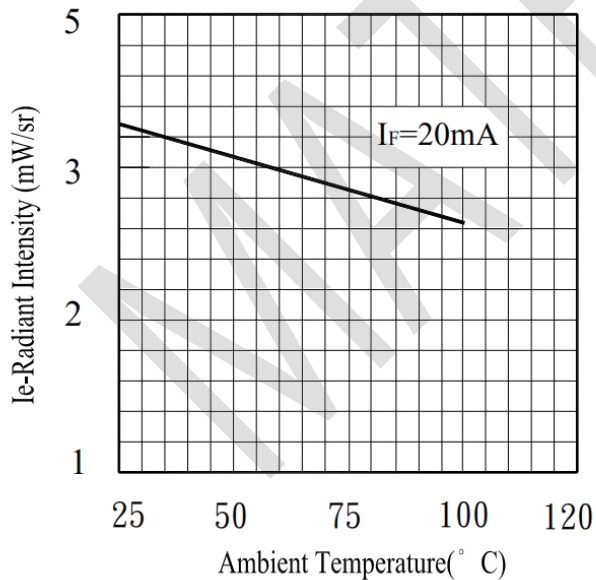
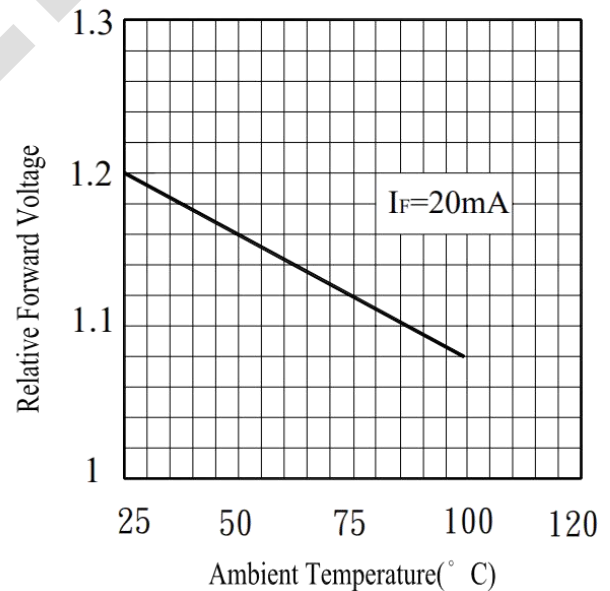
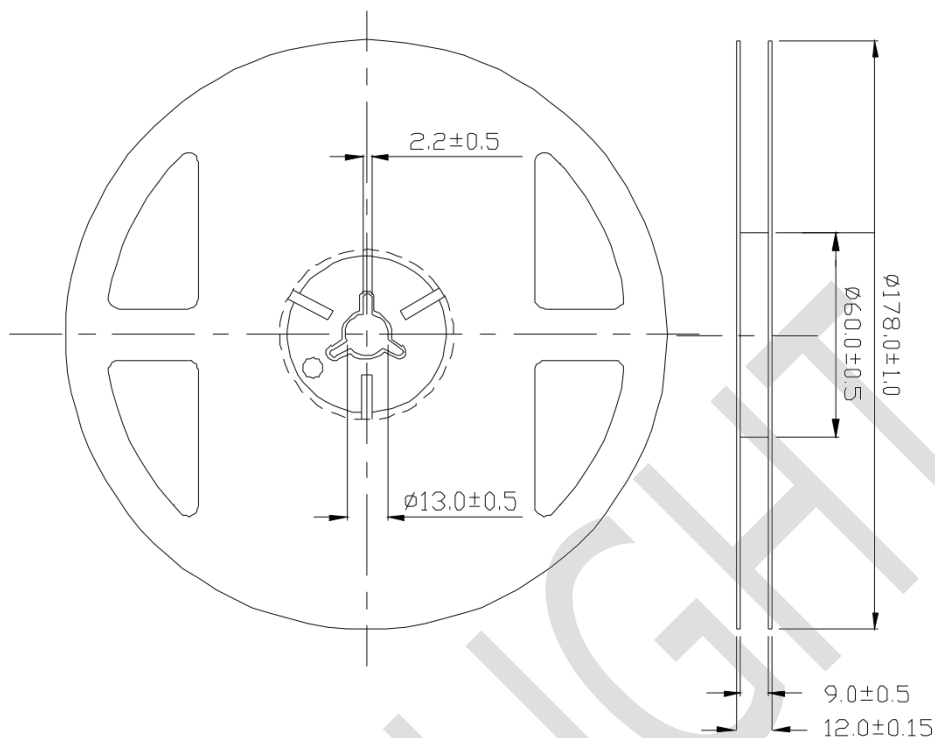


Fig.8 Forward Voltage vs.
Ambient Temperature(°C)

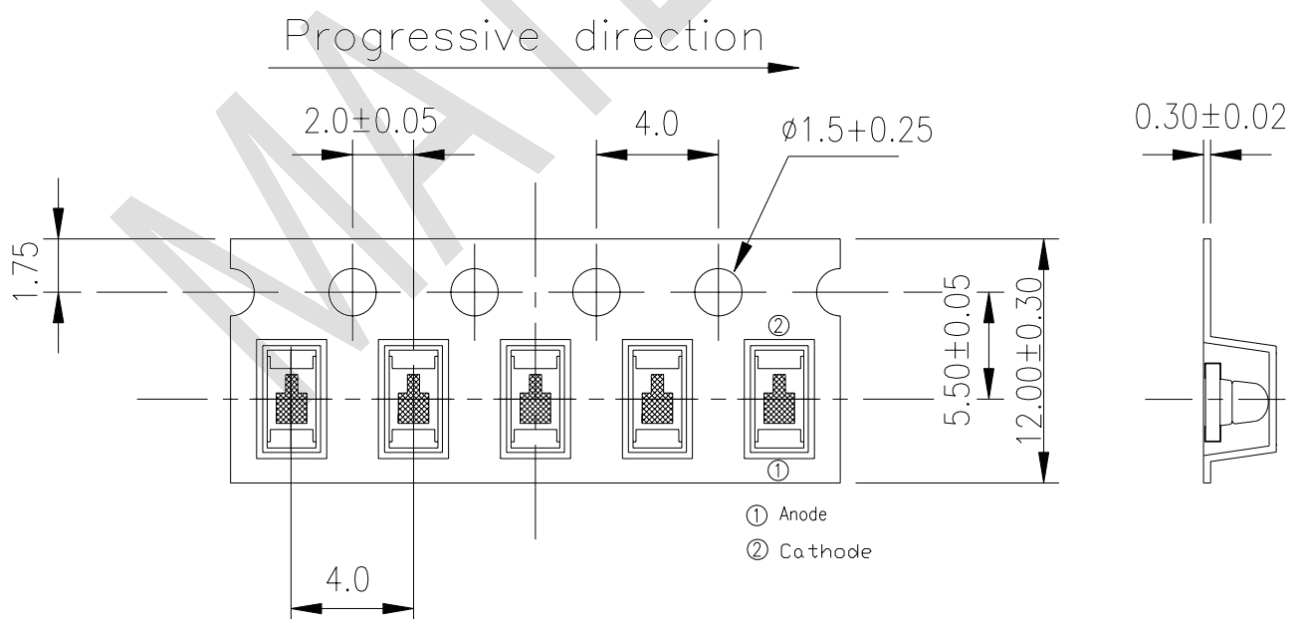


Package Dimensions



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit = mm

Carrier Tape Dimensions:(Quantity: 1500pcs/reel)



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit = mm

Notes

1. Above specification may be changed without notice. MATE LIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instruction for using outlined in these specification sheets. MATE LIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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