T-1 3/4 PACKAGE PIN PHOTODIODE

MID-86414

Description

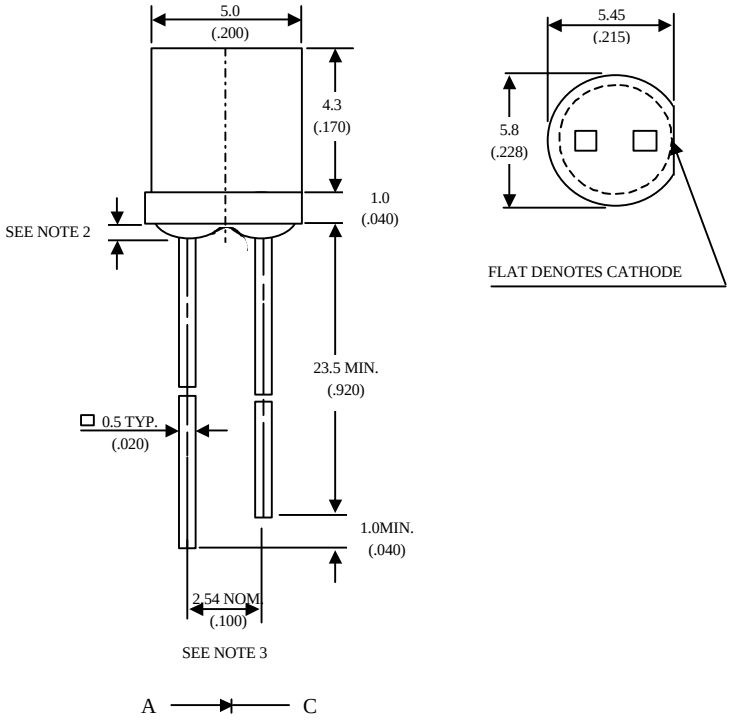
The MID-86414 is a photodiode mounted in water clear end look plastic package and suitable for the variety wavelength.

Features

- High photo sensitivity
- Low junction capacitance
- High cut-off frequency
- Fast switching time
- Acceptance viwe angle : 135°

Package Dimensions

Unit: mm (inches)



Notes :
1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.0 mm (.040") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ T_A=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	150	mW
Operating Temperature Range	-55°C to +100°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature	260°C for 5 seconds	

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min.	Type .	Max.	Unit
Reverse Break Down Voltage	I_R=100μA Ee=0	$V_{(BR)R}$	30			V
Reverse Dark Current	V_R=10V Ee=0	I_D			30	nA
Open Circuit Voltage	λ=850nm Ee=0.1mW/cm^2	V_{OC}		350		mV
Rise Time	V_R =10V,λ=850nm	Tr		30		nsec
Fall Time	R_L=1KΩ	Tf		40		
Light Current	V_R =5V , λ=850nm Ee=0.1mW/cm^2	I_L		1.5		μA
Total Capacitance	V_R =3V , f=1MHz Ee=0	C_T		12		pF

Typical Optical-Electrical Characteristic Curves

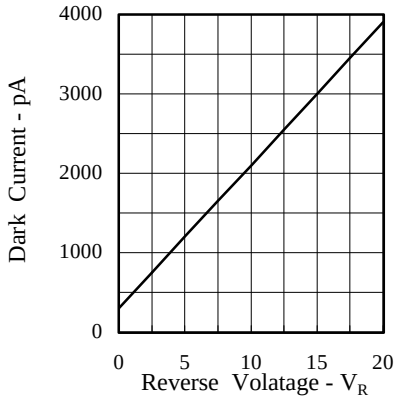


FIG.1 DARK CURRENT VS REVERSE VOLTAGE

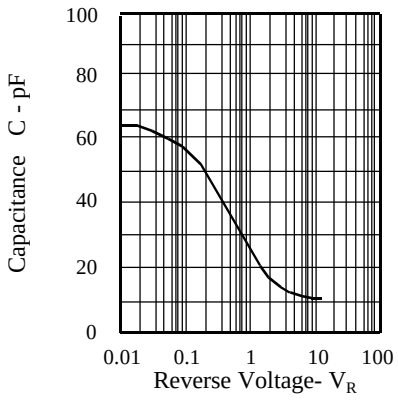


FIG.2 CAPACITANCE VS. REVERSE VOLTAGE

T_A=25°C, Ee=0 mW/cm^2

F=1MHZ, Ee=0mW/cm^2

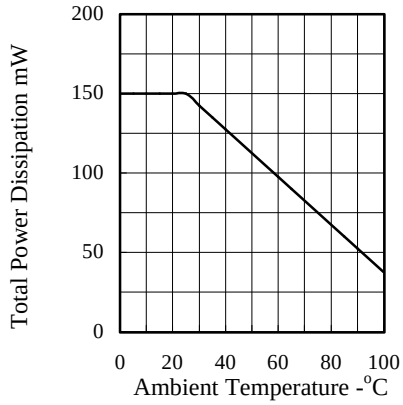


FIG.3 TOTAL POWER DISSIPATION VS. AMBIENT TEMPERATURE

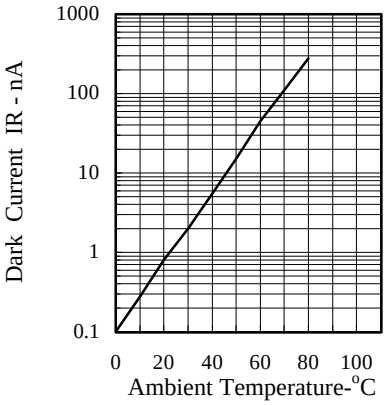


FIG.4 DARK CURRENT VS AMBIENT TEMPERATURE

VR=10, Ee=0 mw/cm^2

Typical Optical-Electrical Characteristic Curves

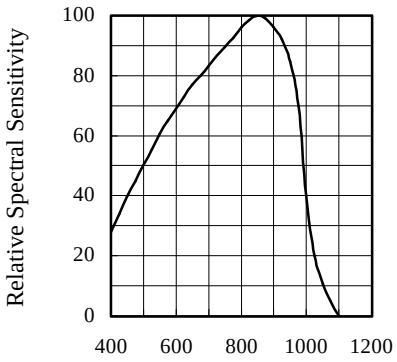


FIG.5 RELATIVE SPECTRAL SENSITIVITY VS. WAVELENGTH

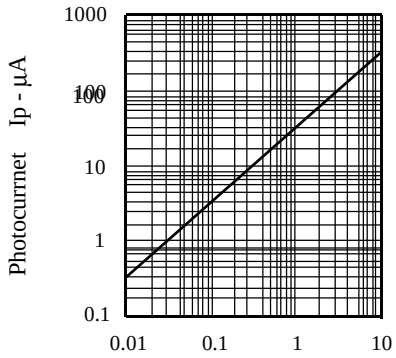


FIG.6 PHOTOCURRENT VS. IRRADIANCE = 850 nm

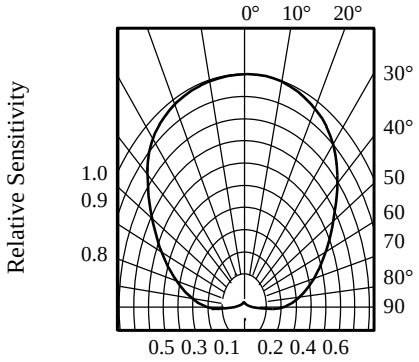


FIG .7 SENSITIVITY DIAGRAM