

# HP - 2MLR

The HP-2MLR is a high-output, high-speed silicon photodiode mounted in a TO-18 type metal stem with a visible light cut-off filter, permitting wide angular response.

**FEATURES**

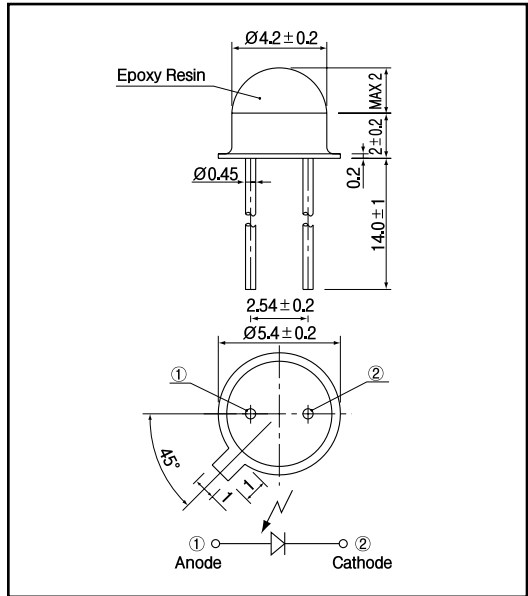
- TO-18 visible ray cut off resin potting type
- Wide angular response ±60deg.

**APPLICATIONS**

- Optical switches
- Optical transmissions
- Financial equipment

**DIMENSIONS**

(Unit : mm)



**MAXIMUM RATINGS**

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	V <sub>r</sub>	20	V
Operating temp.	Topr.	- 20~ +80	
Storage temp.	Tstg.	- 20~ +80	
Soldering temp. *1	Tsol.	260	

\*1. For MAX.5 seconds at the position of 2 mm from the package

**ELECTRO-OPTICAL CHARACTERISTICS**

(Ta=25 )

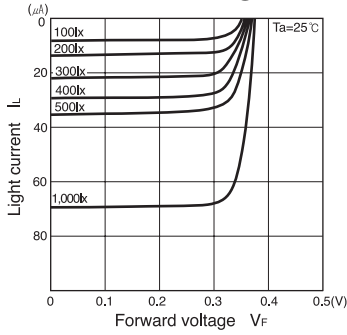
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V <sub>oc</sub>	EV=1,000lx <sup>-2</sup>		0.38		V
Short circuit current	I <sub>sc</sub>	EV=1,000lx <sup>-2</sup>	45	70		µA
Curve factor	C.F.		0.55			-
Dark current	I <sub>d</sub>	V <sub>r</sub> =10V			10	nA
Capacitance	C <sub>t</sub>	V=0V, f=1MHz		73		pF
Temperature coefficient of V <sub>oc</sub>	t			- 2.2		mV/
Temperature coefficient of I <sub>sc</sub>	t			0.18		%/
Spectral sensitivity				600~1,050		nm
Peak wavelength	λ			900		nm
Half angle				±60		deg.

\*2. Color temp. =2856K standard Tungsten lamp

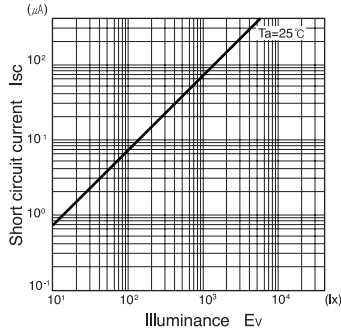
**Photo diodes**

**HP - 2MLR**

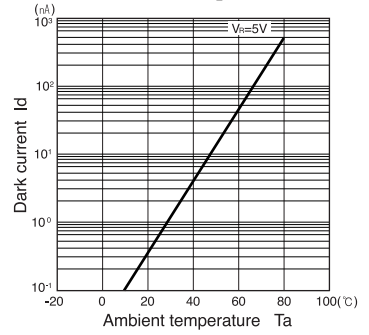
**Light current Vs. Forward voltage**



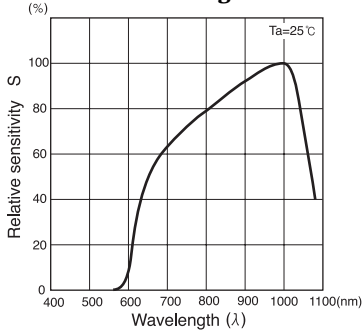
**Short circuit current Vs. Illuminance**



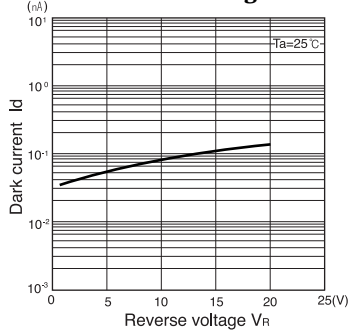
**Dark current Vs. Ambient temperature**



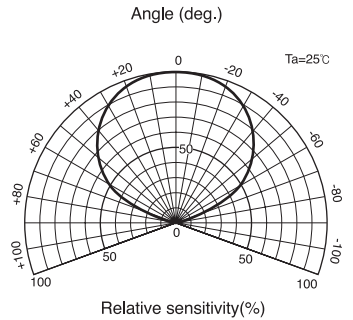
**Relative sensitivity Vs. Wavelength**



**Dark current Vs. Reverse voltage**



**Radiant Pattern**



**Capacitance between terminals Vs. Reverse voltage**

