

Features

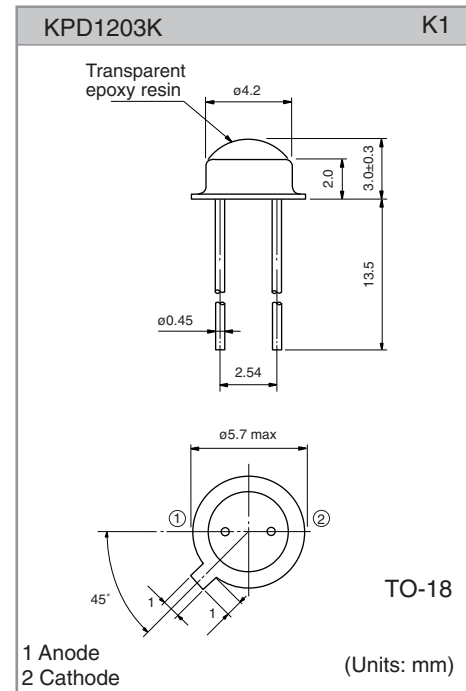
- Transparent epoxy potting
- High sensitivity
- Broad directivity
- Unbiased for low frequency or biased for high frequency measurement

Applications

- Optical switches
- Optical encoders
- Pulse detectors
- Sensors and industrial controls

Maximum ratings

Item	Symbol	Value	Units
Reverse Voltage	V_R	15	V
Reverse Current	I_R	500	μA
Forward Current	I_F	60	mA
Operating Temperature	T_{op}	-20 ~ +100	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-30 ~ +100	$^{\circ}\text{C}$

**Characteristics** ($T_a=25^{\circ}\text{C}$ unless otherwise noted.)

Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Active Dia.	D	0.92x0.92			mm	
Operating Voltage	V_{RO}		0		V	For low frequency
			5			For high frequency
Sensitive Wavelength		450	950(ρ)	1100	nm	ρ =Peak wavelength
Open Circuit Voltage	V_{op}	320	400		mV	1000lux(@2856K)
Short Circuit Current	I_{sh}	4	9		μA	
Dark Current	I_d		0.1	1	nA	$V_R=5\text{V}$
Capacitance	C		50	60	pF	$V=0, f=1\text{MHz}$
Rise/Fall Time	t_r		8	10	ns	$V_R=5\text{V}, \lambda=780\text{nm}, R_L=50$
	t_f		27	35		
Cutoff Frequency	f_c	10	15		MHz	$V_R=5\text{V}, \lambda=780\text{nm}, R_L=50$

KPD1203K

