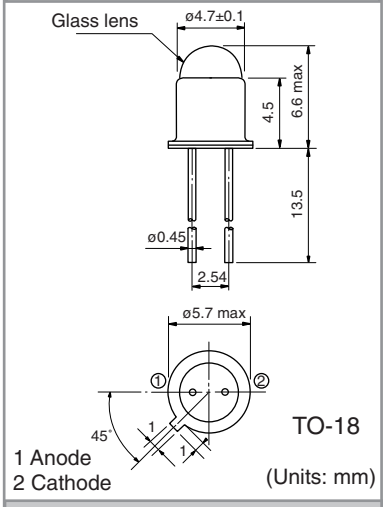
Si Photodiode KPD701H KPD703H

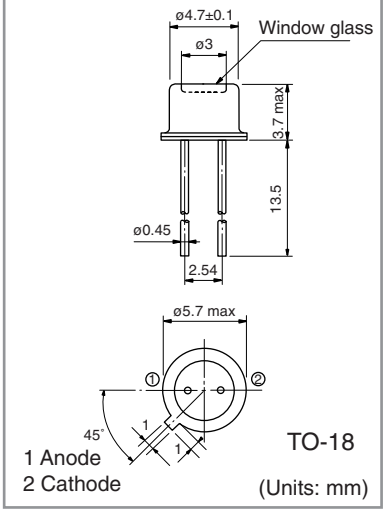
Features
- Hermetic seal type for high reliability uses
- Wide operating temperature
- Glass lens(701H) or flat-glass window (703H)
- Unbiased for low frequency or biased for high frequency measurement

Applications
- Optical switches
- Optical encoders
- Pulse detector
- Optical data link
- Sensors and industrial controls

KED701H H1



KED703H H3



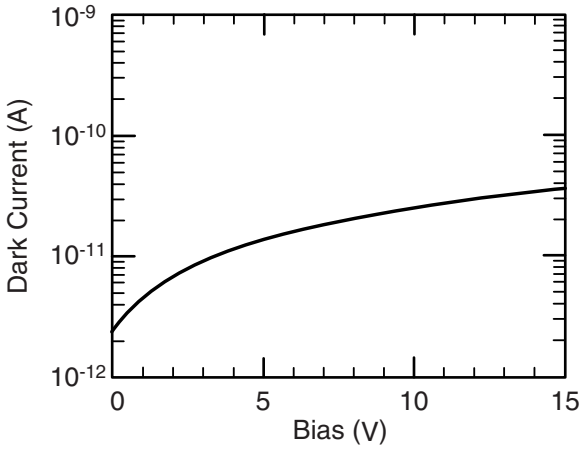
Maximum ratings

Item	Symbol	Value	Units
Reverse Voltage	V_R	15	V
Reverse Current	I_R	500	μA
Forward Current	I_F	150	mA
Operating Temperature	T_{op}	-40 ~ +125	˚C
Storage Temperature	T_{stg}	-55 ~ +125	˚C

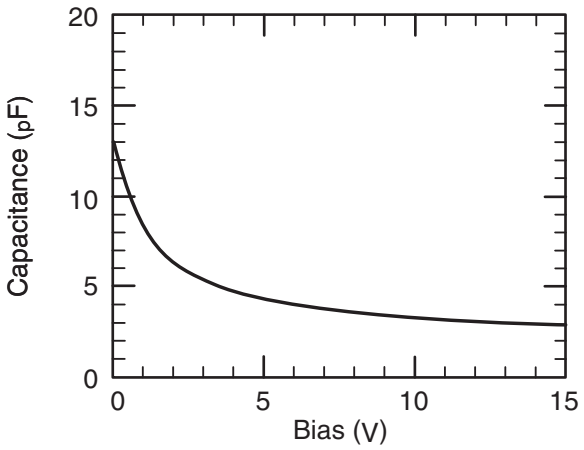
Characteristics (T_a=25 ˚C unless otherwise noted.)

Parameter		Symbol	Min.	Typ.	Max.	Units	Test Conditions
Active Dia.		D		0.54x0.54		mm	
Operating Voltage		V_{R0}		0		V	For low frequency
				5			For high frequency
Sensitive Wavelength			400	880($_p$)	1000	nm	$_P$=Peak wavelength
Open Circuit Voltage	703H	V_{op}	320	390		mV	1000lux(@2856K)
	701H						
Short Circuit Current	703H	I_{sh}	0.5	1.5		μA	
	701H		7	15			
Dark Current		I_d		0.1	1	nA	V_R=5V
Capacitance		C		15	20	pF	V=0, f=1MHz
Rise/Fall Time		t_r		7	10	ns	V_R=5V, =780nm, R_L=50
		t_f		22	25		
Cutoff Frequency		f_c	8	10		MHz	V_R=5V, =780nm, R_L=50

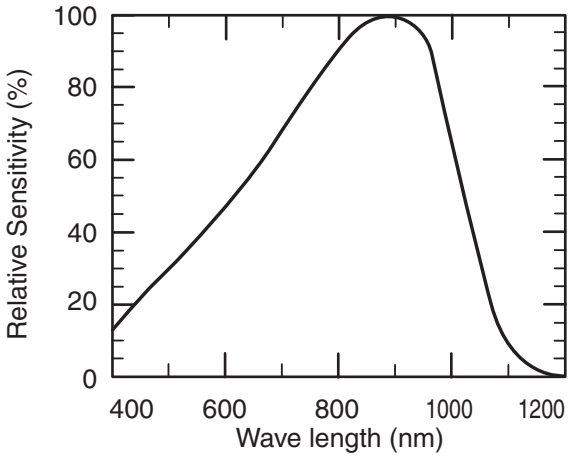
Dark Current-Reverse Voltage (T_a=25˚C)



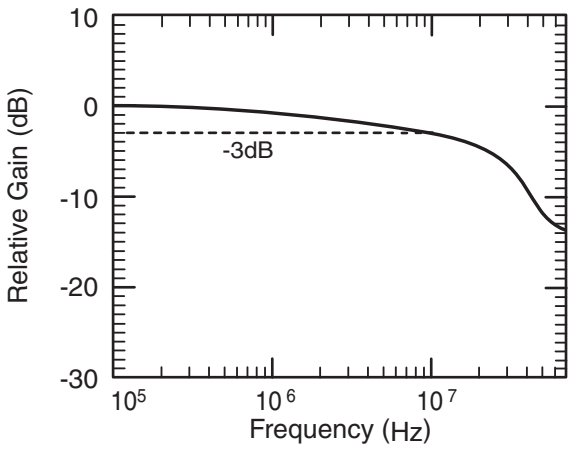
CV Charastaristics



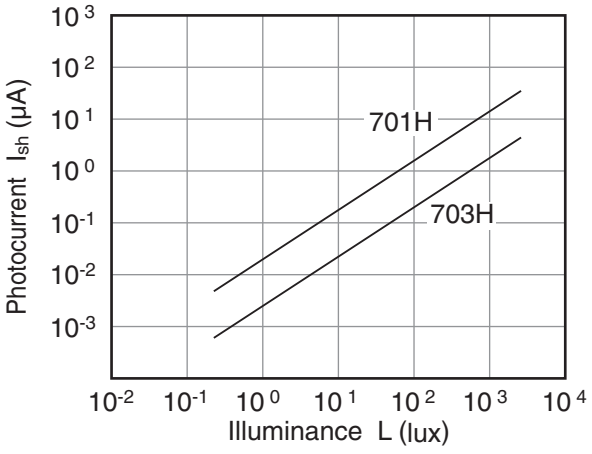
Spectral Sensitivity



Frequency Response



Photocurrent-Illuminance (T_a=25˚C)



Directivity