



1. Transmissive Type

Type No.	Feature	Gap [mm]	Slit [mm]	Electro-Optical Characteristics																
				Input				Output				Transmission								
				Forward Voltage V _f [V]		Reverse Current I _r [μA]		Dark Current I _{cos} [nA]		Collector Current I _c [mA]		C-E Saturation Voltage V _{CE(sat)} [V]		Rise Time Fall Time t _r , t _f [μs]			Typ			
				Typ	I _f (mA)	Max	V _r (V)	Max	V _o (V)	Min	V _o (V)	I _c (mA)	Max	I _c (mA)	I _c (mA)	Max	I _c (mA)	I _c (mA)	t _r	t _f
KIT1001A	Small Type	1.0	1.0	1.2	20	10	5	100	10	0.5	5	10	0.4	10	0.3	10	5	1.0	0.1	
KIT1018S	SMD Type	1.1	0.3	1.2	20	10	5	100	10	0.1	5	5	0.4	10	0.03	10	5	1.0	0.1	
KIT1019A	PWB Direct Mount Type	1.1	0.3	1.2	20	10	5	100	10	0.1	5	5	0.4	10	0.03	10	5	1.0	0.1	
KIT2009A	PWB Direct Mount Type	2.7	0.5	1.2	20	10	3	100	5	0.5	5	10	0.4	20	0.5	20	5	0.5	1	
KIT3001A	Snap-In Mount Type	3.0	1.0	1.2	20	10	5	100	10	0.2	5	20	0.4	20	0.1	50	5	0.1	1	
KIT3001B	Snap-In Mount Type	3.0	1.0	1.2	20	10	5	100	10	0.2	5	20	0.4	20	0.1	50	5	0.1	1	
KIT3003C	Snap-In Mount Type	3.0	1.0	12	20	10	5	100	10	0.5	5	20	0.4	20	0.05	50	5	0.1	1	
KIT3018H	PWB Direct Mount Type	3.2	0.5	1.2	20	10	4	100	10	0.1	5	20	0.4	30	0.1	5	5	0.1	0.1	
KIT4001A	Small Type	4.5	0.4	1.2	20	10	5	100	10	0.2	5	20	0.4	20	0.1	50	5	0.1	1	
KIT5002C	Snap-In Mount Type	5.0	0.5	1.2	20	10	3	100	20	0.5	5	20	0.4	40	0.5	3	4	2	2.0	0.1
KIT5003A	PWB Direct Mount Type	5.0	0.5	1.2	20	10	3	100	10	0.5	5	20	0.4	30	0.1	4	5	5.0	0.1	
KIT5009C	Snap-In Mount Type	5.0	0.5	1.2	20	10	5	100	10	1.0	5	20	0.4	20	0.1	5	4	5	2.0	0.1



KIT1001A



KIT1018S



KIT1019A

1. Transmissive Type

Type No.	Feature	Gap [mm]	Slit [mm]	Electro-Optical Characteristics																
				Input				Output				Transmission								
				Forward Voltage V _f [V]		Reverse Current I _r [μA]		Dark Current I _{cos} [nA]		Collector Current I _c [mA]		C-E Saturation Voltage V _{CE(sat)} [V]		Rise Time Fall Time t _r , t _f [μs]			Typ			
				Typ	I _f (mA)	Max	V _r (V)	Max	V _o (V)	Min	V _o (V)	I _c (mA)	Max	I _c (mA)	I _c (mA)	Max	I _c (mA)	I _c (mA)	t _r	t _f
KIT5011C	Snap-In Mount Type	5.0	0.5	1.2	20	10	5	100	10	0.5	5	20	0.4	20	0.1	4	5	5	2.0	0.1
KIT5016A	PWB Direct Mount Type	5.0	0.5	1.2	20	10	5	100	10	1	5	20	0.4	20	0.1	4	5	5	2.0	0.1
KIT5024A	PWB Direct Mount Type	5.0	0.5	1.2	20	10	5	100	10	0.5	5	20	0.4	20	0.1	5	5	0.1	0.1	
KIT5033C	Snap-In Mount Type	5.0	0.5	1.2	20	10	3	100	20	0.5	5	20	0.4	40	0.5	3	4	2	2.0	0.1
KIT5038C	Screw Mount, Dust proof Type	5.0	0.5	1.2	20	100	5	100	10	0.5	5	20	0.4	20	0.5	4	5	5	2.0	0.1
KIT5039C	Snap-In Mount, Dust proof Type	5.0	0.5	1.2	20	100	5	100	10	0.5	5	20	0.4	20	0.5	4	5	5	2.0	0.1
KIT8002A	PWB Direct Mount Type	8.0	0.8	12	20	10	3	100	10	0.5	5	20	0.4	30	0.1	4	5	5.0	0.1	
KPI511	PWB Direct Mount Type	5.0	0.5	1.2	20	10	5	100	10	0.5	5	20	0.4	20	0.1	5	5	2.0	0.1	
KPI512	PWB Direct Mount Type	5.0	0.5	1.2	20	10	5	100	10	0.5	5	20	0.4	20	0.1	5	5	2.0	0.1	
KPILO5	PWB Direct Mount Type	5.0	0.5	1.2	20	10	5	100	10	0.2	5	20	0.4	20	0.1	5	5	2.0	0.1	
KPILO6	PWB Direct Mount Type	5.0	0.5	1.2	20	10	5	100	10	0.2	5	20	0.4	20	0.1	5	5	2.0	0.1	



KIT5002C



KIT5009C



KIT5011C

1. Transmissive Type

Type No.	Feature	Gap [mm]	Slit [mm]	Electro-Optical Characteristics													
				Input			Output			Transmission							
				Operating Supply Voltage V_f [V]	Low Level Output Voltage V_{OL} [V]		High Level Output Voltage V_{OH} [V]		Low Level Output Current I_L [mA]		High Level Output Current I_H [mA]		Low Level Output Voltage V_{OL} [V]				
Min	V_{CC} (V)	R_L (K Ω)	Min	V_{CC} (V)	R_L (K Ω)	Min	K_L (K Ω)	Min	K_H (K Ω)	Min	V_{OL} (V)	R_L (K Ω)					
KIT5015C	Light-on, Snap-In Mount Type	5.0	0.5	2.7~5.5	0.4	3.3	16	2.9	3.3	4.7	16.5	3.3	16.5	3.3	-	-	-



KIT5015C

2. Actuator Type

Type No.	Feature	Operating Angle [deg.]	Electro-Optical Characteristics																
			Input			Output		Transmission						Rise Time Fall Time					
			Forward Voltage V_f [V]	Reverse Current I_r [μ A]	Dark Current I_{CO} [nA]	Collector Current I_C [mA]		C-E Saturation Voltage $V_{CE(sat)}$ [V]		Rise Time t_r [μ s]		Fall Time t_f [μ s]		V_{OL} (V)	I_L (mA)	R_L (K Ω)			
Typ	I_r (mA)	Max	V_f (V)	Max	V_{OL} (V)	Min	V_{CC} (V)	I_C (mA)	Max	I_C (mA)	I_C (mA)	t_r	t_f	V_{OL} (V)	I_L (mA)	R_L (K Ω)			
KIA0002C	Snap In Mount	9.0	1.2	20.0	10.0	5	100	10	0.5	5	20	0.5	20	0.10	5	5	2.0	100	
KIA0005C	Snap In Mount	9.0	1.2	20.0	10.0	5	100	10	3	5	20	0.4	20	0.10	5	4	5	2.0	0.1
KIA1001H	Snap In Mount	10.0	1.2	20.0	10.0	5	100	10	0.5	5	20	0.4	20	0.10	4	5	5	2.0	100
KIA1002H	Snap In Mount	10.0	1.2	20.0	10.0	3	100	10	0.5	5	20	0.4	20	0.10	4	5	5	2.0	100
KPIL08	Connector With Harness Wire	-	1.15	10.0	10.0	5	100	24	0.4	5	20	0.4	10	0.10	15	5	1.0	1	



KIA0002C



KIA1001H

3. Reflective Type

Type No.	Feature	Detecting Distance [mm]	Electro-Optical Characteristics																
			Input			Output		Transmission						Rise Time Fall Time					
			Forward Voltage V_f [V]	Reverse Current I_r [μ A]	Dark Current I_{CO} [nA]	Collector Current I_C [mA]		C-E Saturation Voltage $V_{CE(sat)}$ [V]		Rise Time t_r [μ s]		Fall Time t_f [μ s]		V_{OL} (V)	I_L (mA)	R_L (K Ω)			
Typ	I_r (mA)	Max	V_f (V)	Max	V_{OL} (V)	Min	V_{CC} (V)	I_C (mA)	Max	I_C (mA)	I_C (mA)	t_r	t_f	V_{OL} (V)	I_L (mA)	R_L (K Ω)			
KIR-3006A-H	Connector with Harness Wire	3.81	1.8	20.0	100	2	100	10	0.5	5	20	0.5	20	0.50	5	-	-	-	
KPI-3020R	Surface Mount Type	1	1.2	20.0	10.0	5	100	10	100	2	4	0.4	5	1.00	30	25	2	0.1	1



KPI-3020R

2. Distance Sensor

Type No.	Feature	Detecting Distance [mm]	Electro-Optical Characteristics														
			Input			Output			Transmission								
			Forward Voltage V_f [V]	Peak Wave λ_p [nm]	Supply Voltage V_{CC} [V]	Dark Current I_{CO} [nA]	Maximum Output Voltage V_{OL} [V]	Forward Current I_f	Low Level Output Voltage V_{OL} [V]	Rise Time t_r [μ s]	Fall Time t_f [μ s]	V_{OL} (V)	I_L (mA)	R_L (K Ω)			
Typ	I_f (mA)	Max	V_f (V)	Max	Min	V_{CC} (V)	Typ	V_{OL} (V)	Max	V_{OL} (V)	Typ	t_r	t_f	V_{OL} (V)	I_L (mA)	R_L (K Ω)	
KMED002A	Dual Output	max 150	1.3	50	870	20	3.3~5.0		4.2	5							



KMED002A