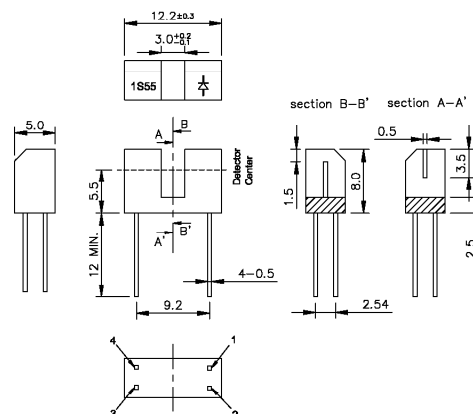
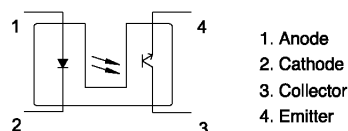


cosmo**Photointerrupter KW1S55FC****Features**

1. Horizontal slit type
2. PWB direct mounting type
3. GAP between light emitter and detector : 3.0mm
4. Slit width : 0.5mm

Applications

1. OA equipment, such as printer etc.
2. VCRs, cassette decks
3. Floppy disk drives

Outside Dimension:Unit (mm)**Schematic:Top View****Absolute Maximum Ratings**

(Ta=25°C)

	Parameter	Symbol	Rating	Unit
Input	Forward current	I _F	50	mA
	Peak forward current *1	I _{FP}	1	A
	Reverse voltage	V _R	6	V
	Power dissipation	P _D	75	mW
Output	Collector-emitter voltage	V _{CEO}	35	V
	Emitter-collector voltage	V _{ECO}	6	V
	Collector current	I _C	20	mA
	Power dissipation	P _D	75	mW
Total power dissipation		T _{PD}	100	mW
Operating temperature		T _{OPR}	-25 to +85	°C
Storage temperature		T _{STG}	-40 to +100	°C
Soldering temperature *2		T _{SOL}	260	°C

*1 Pulse width ≤ 100 μs, duty ratio=1%

*2 For 5 seconds

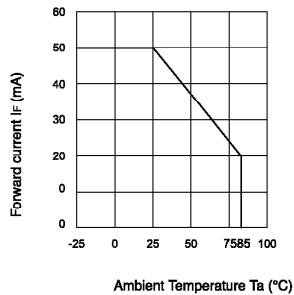
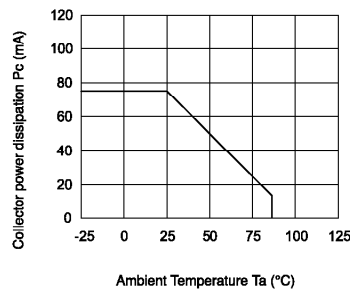
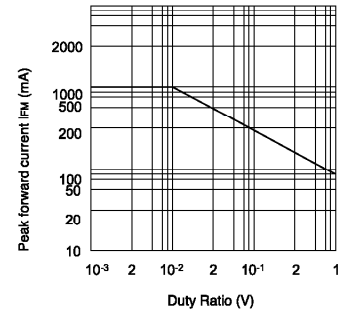
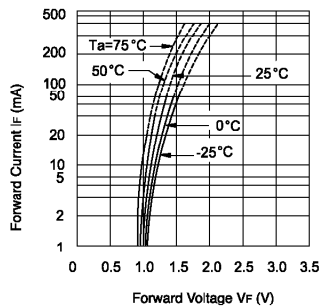
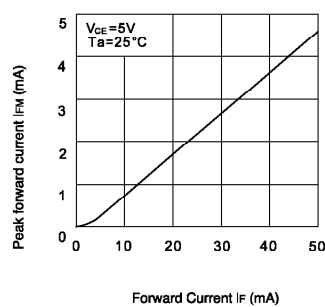
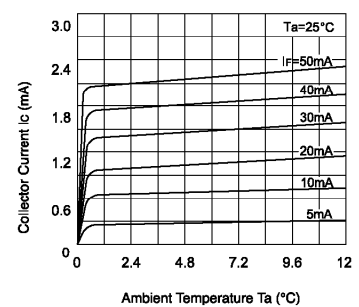
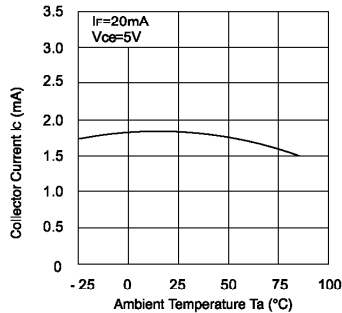
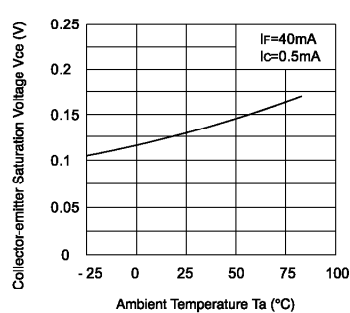
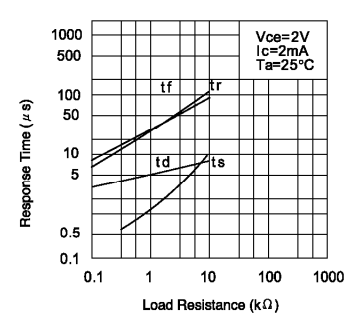
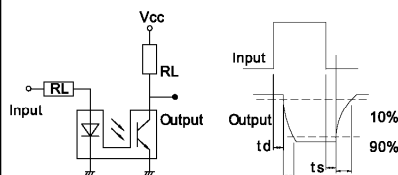
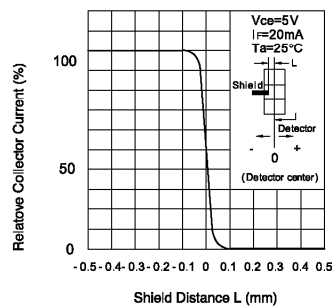
Electro-optical Characteristics

(Ta=25°C)

	Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V _F	I _F =20mA	—	1.2	1.4	V
	Peak forward voltage	V _{FM}	I _{FM} =0.5A	—	3	4	V
	Reverse current	I _R	V _R =3V	—	—	10	μA
Output	Collector-emitter dark current	I _{CEO}	V _{CE} =20V	—	1	100	nA
Transfer characteristics	Collector Current	I _C	V _{CE} =5V, I _F =20mA	0.5	—	5	mA
	Collector saturation voltage	V _{CE(SET)}	I _F =40mA, I _C =0.5mA	—	—	0.4	V
	Response time (Rise)	T _R	V _{CE} =2V, I _C =2mA, R _L =100Ω	—	3	15	μs
	Response time (Fall)	T _F		—	4	20	μs

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KW1S55FC

Fig.1 Forward Current vs. Ambient Temperature**Fig.2** Collector Power Dissipation vs. Ambient Temperature**Fig.3** Peak Forward Current vs. Duty Ratio**Fig.4** Forward Current vs. Forward Voltage**Fig.5** Collector Current vs. Forward Current**Fig.6** Collector Current vs. Collector-emitter Voltage**Fig.7** Collector Current vs. Ambient Temperature**Fig.8** Collector-emitter Saturation Voltage vs. Ambient Temperature**Fig.9** Response Time vs. Load Resistance**Test Circuit for Response Time****Fig.10** Relative Collector Current vs. Shield Distance (1)**Fig.11** Relative Collector Current vs. Shield Distance (2)