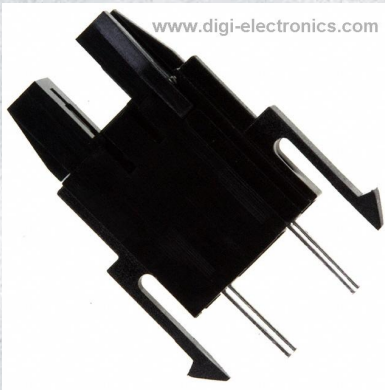


# GP1S562 Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	GP1S562-DG
Manufacturer	<a href="#">Sharp Microelectronics</a>
Manufacturer Product Number	GP1S562
Description	PHOTOINTERRUPTER SLOT 3.0MM PCB
Detailed Description	Optical Sensor

This model GP1S562 is available at DiGi Electronics.

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We welcome your inquiries regarding pricing, lead time, or other product-related questions.

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DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

GP1S562

Series:

\*

Manufacturer:

Sharp Microelectronics

Product Status:

Obsolete

## Environmental & Export classification

RoHS Status:

RoHS non-compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

Not Applicable

HTSUS:

8541.49.8000

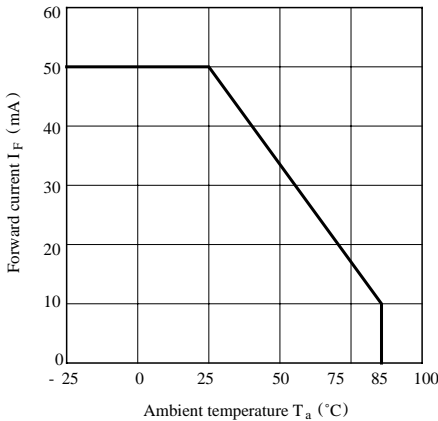


**Electro-optical Characteristics**

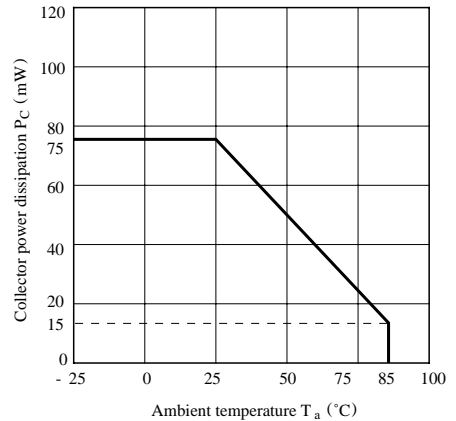
( $T_a = 25^\circ\text{C}$ )

Parameter		Symbol	Condition	MIN.	TYP.	MAX.	Unit	
Input	Forward voltage	$V_F$	$I_F = 20\text{mA}$	-	1.25	1.4	V	
	Peak forward voltage	$V_{FM}$	$I_{FM} = 0.5\text{A}$	-	3	4	V	
	Reverse current	$I_R$	$V_R = 3\text{V}$	-	-	10	$\mu\text{A}$	
Output	Collector dark current	$I_{CEO}$	$V_{CE} = 20\text{V}$	-	1	100	nA	
Transfer characteristics	Collector current	$I_C$	$V_{CE} = 5\text{V}, I_F = 20\text{mA}$	1.4	-	8.5	mA	
	Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_F = 40\text{mA}, I_C = 1.4\text{mA}$	-	-	0.4	V	
	Response time	Rise time	$t_r$	$V_{CE} = 2\text{V}, I_C = 2\text{mA}$	-	3	15	$\mu\text{s}$
		Fall time	$t_f$	$R_L = 100\Omega$	-	4	20	$\mu\text{s}$

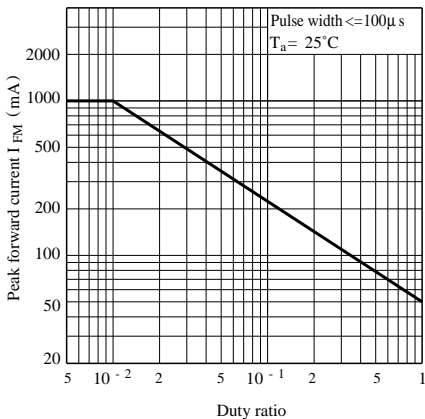
**Fig. 1 Forward Current vs. Ambient Temperature**



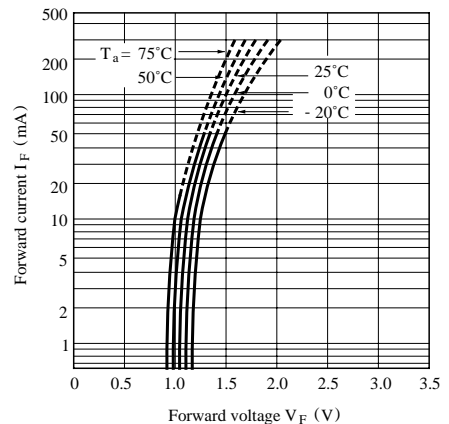
**Fig. 2 Collector Power Dissipation vs. Ambient Temperature**



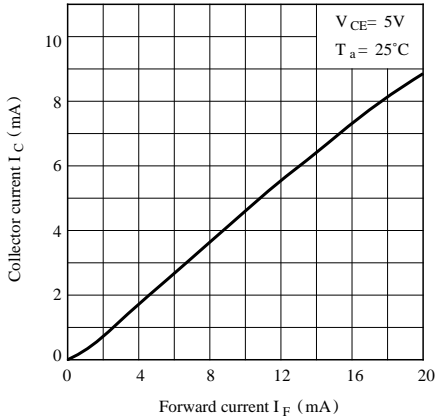
**Fig. 3 Peak Forward Current vs. Duty Ratio**



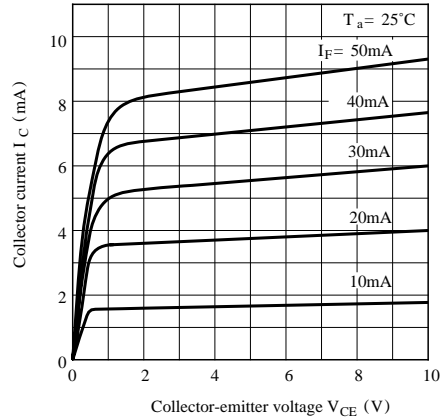
**Fig. 4 Forward Current vs. Forward Voltage**



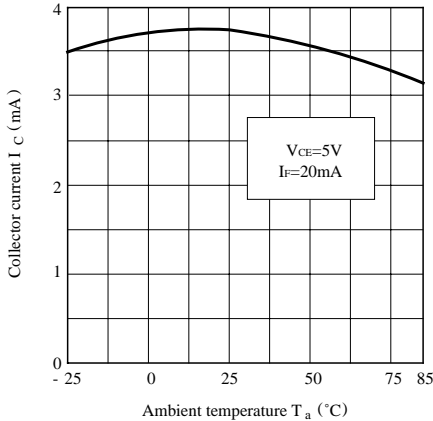
**Fig. 5 Collector Current vs. Forward Current**



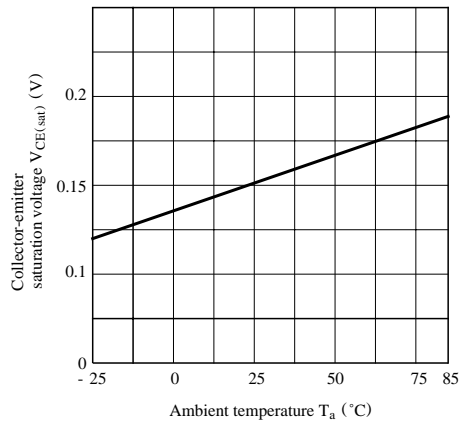
**Fig. 6 Collector Current vs. Collector-emitter Voltage**



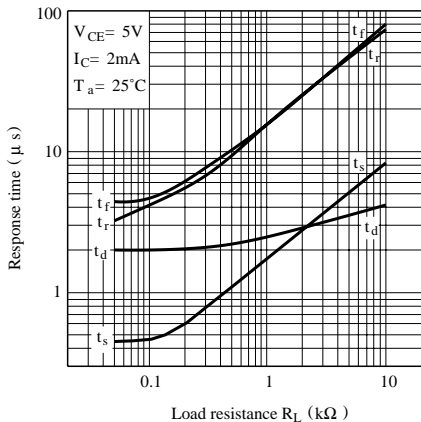
**Fig. 7 Collector Current vs. Ambient Temperature**



**Fig. 8 Collector-emitter Saturation Voltage vs. Ambient Temperature**



**Fig. 9 Response Time vs. Load Resistance**



**Test Circuit for Response Time**

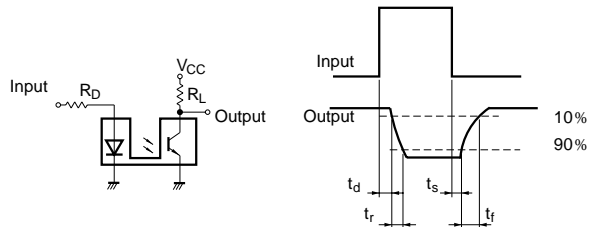


Fig.10 Frequency Response

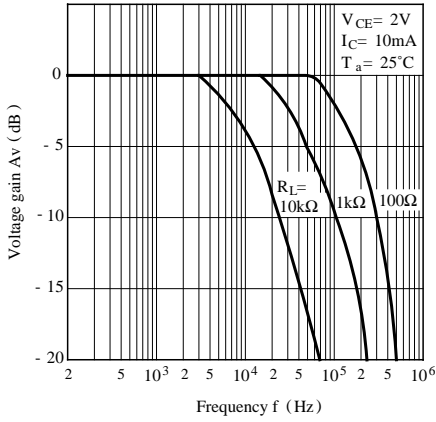
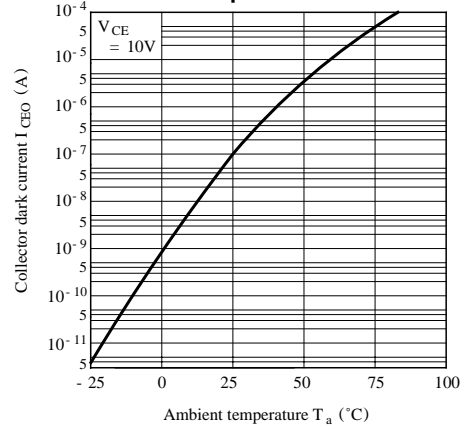


Fig.11 Collector Dark Current vs. Ambient Temperature



- Please refer to the chapter “Precautions for Use”.

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    - Test and measurement equipment
    - Industrial control
    - Audio visual equipment
    - Consumer electronics
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    - Traffic signals
    - Gas leakage sensor breakers
    - Alarm equipment
    - Various safety devices, etc.
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