

Spec. No. : ODT-W040-03(1)

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SPECIFICATION

MODEL NAME : Photo Interrupter

MODEL NO. : OGT203T



Head office : 814, Youngam-ri, Bongdong-eup, Wanju-gun, Jeonbuk-do, Korea
TEL : 82-63-263-7626, Fax : 82-63-262-7624

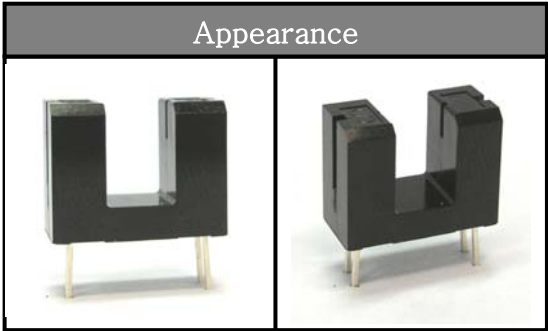
Jeonju office : TEL : 82-63-214-2112, Fax : 82-63-214-2113
E-mail : kgbb@od-tech.com

■ Description

The OGT203T is photo-interrupter high-performance standard type, combined high-output GaAlAs IRED and high sensitive photo-transistor.

■ Features

- High-speed response
- Easy to mount on PCB



■ Applications

- Tape – end sensors
- Encoders, Timing sensors, Edge sensors.

■ Absolute Maximum Ratings

(Ta= 25℃)

Parameter		Symbol	Rating	Unit
Input	Power dissipation	Po	100	mW
	Reverse voltage	VR	5	V
	Forward current	IF	50	mA
	Pulse forward current (tw=100μs, T=10ms)	IFP	1	A
Output	Collector Power dissipation	PC	100	mW
	Collector current	Ic	40	mA
	C-E voltage	VCEO	30	V
	E-C voltage	VECO	5	V
Operating temp.		TOPR	-25 ~ 85	℃
Storage temp.		TSTG	-30 ~ 100	℃

■ Electro-Optical Characteristics

(Ta=25℃)

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	VF	IF=20mA	—	1.25	1.6	V
	Reverse current	IR	VR=5V	—	—	10	μA
	Peak wavelength	λ P		—	940	—	nm
Output	Collector dark current	ICEO	VCEO=10V	—	—	0.1	μA
Light current		IL	VCE=5V, IF=20mA	0.25	—	—	mA
C-E saturation voltage		VCE(sat)	IF=30mA, Ic=0.1mA	—	—	0.3	V
Switching Speeds	Rise time	tr	VCC=5V,Ic=2mA RL=100Ω	—	5	—	μs
	Fall time	tf		—	5	—	μs

■ Typical electrical / Optical characteristic curves

(Ta=25℃)

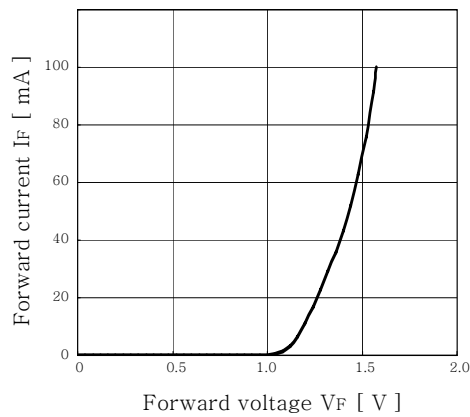


Fig.1 Forward current vs. Forward voltage

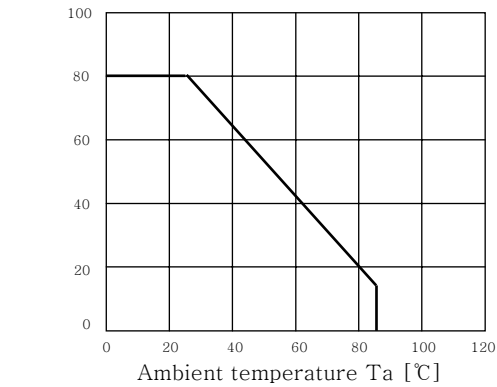


Fig.2 Collector Power dissipation vs. Ambient temperature

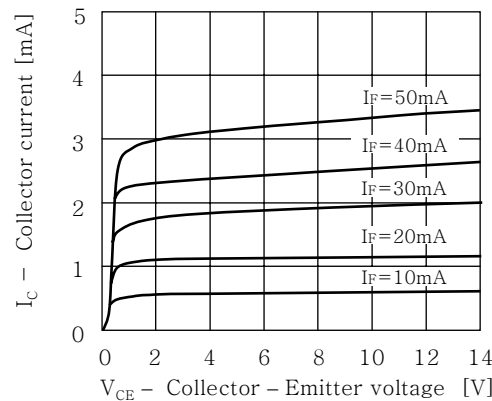


Fig.3 Collector current vs. Collector - Emitter voltage

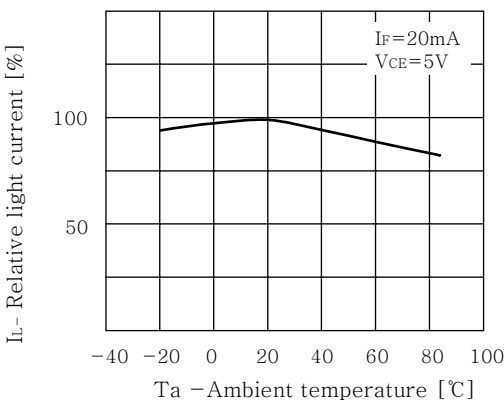


Fig.4 Relative light current vs. Ambient temperature

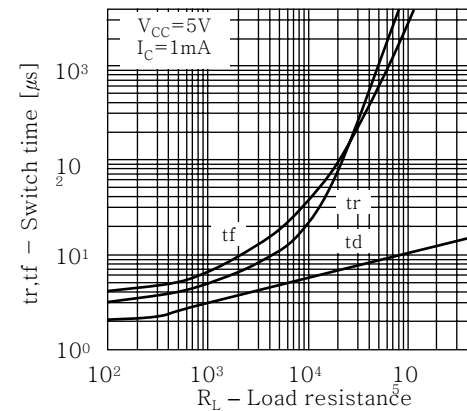


Fig.5 Switching time vs. Load resistance

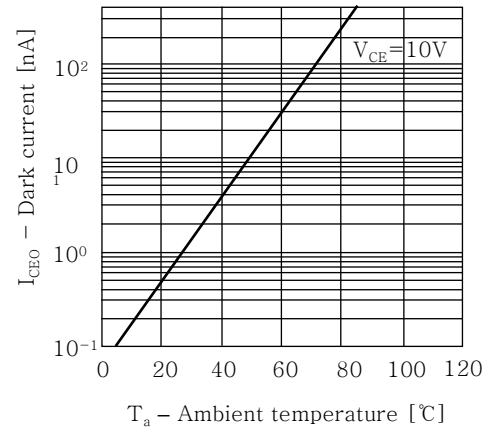


Fig.6 Dark current vs. Ambient temperature

Outline Dimensions

(Unit : mm)

