

Photo Interrupter

TLP852

Applications -

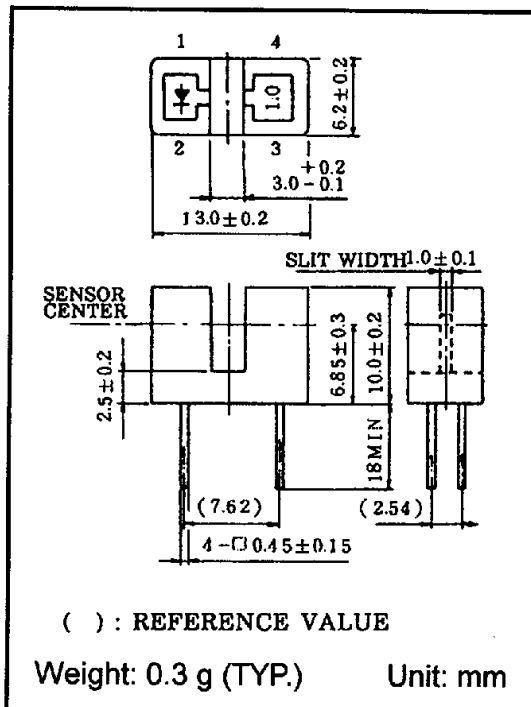
- Edge Sensor
- Position and Rotation Sensing
- Timing Detection of Copier, FAX, Printer

Features -

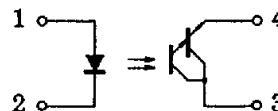
- Easily Mountable on a Printed Wiring Board
- High Current Transfer Ratio: $I_C/I_F = 20\%$ (Min.)
- Visible Light Filter used on Detector Side of Interrupter
- Polycarbonate Package

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
LED	Forward current	I_F	50	mA
	Forward Current Derating (Ta>25°C)	$\Delta I_F / ^\circ C$	-0.33	mA / °C
	Reverse Voltage	V_R	5	V
DETECTOR	Collector-Emitter Voltage	V_{CE0}	30	V
	Emitter-Collector Voltage	V_{ECO}	5	V
	Collector Power Dissipation	P_C	75	mW
	Collector Power Dissipation Derating (Ta>25°C)	$\Delta P_C / ^\circ C$	-1	mW / °C
	Collector Current	I_C	50	mA
	Operating Temperature Range	T_{OPR}	-25~85	°C
Storage Temperature Range	T_{STG}	-40~100	°C	



PIN CONNECTION



OPTO-ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
LED	Forward Voltage	V_F	$I_F = 10\text{mA}$	1.00	1.15	1.30	V
	Reverse Current	I_R	$V_R = 5\text{V}$	—	—	10	μA
	Peak Emission Wavelength	λ_p	$I_F = 20\text{mA}$	—	940	—	nm
DETECTOR	Dark Current	$I_D(I_{CE0})$	$V_{CE} = 16\text{V}, I_F = 0$	—	—	0.25	μA
	Peak Sensitivity Wavelength	λ_p	—	—	870	—	nm
COUPLED	Current Transfer Ratio	I_C / I_F	$V_{CE} = 2\text{V}, I_F = 10\text{mA}$	30	200	—	%
	Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_F = 10\text{mA}, I_C = 1.5\text{mA}$	—	0.85	1.2	V
	Rise Time	t_r	$V_{CC} = 5\text{V}, I_C = 10\text{mA}$ $R_L = 100\Omega$	—	80	—	μs
	Fall Time	t_f		—	70	—	

marktech
optoelectronics

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TLP852 Graphs -

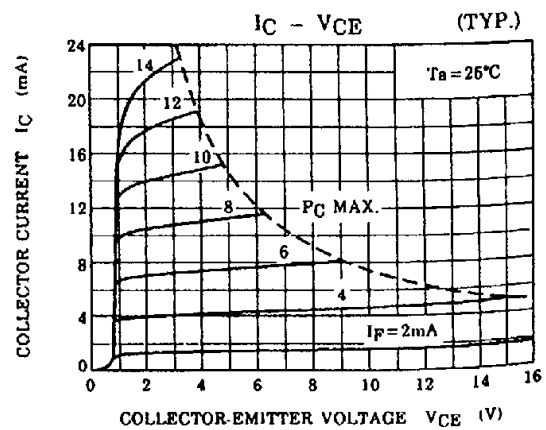
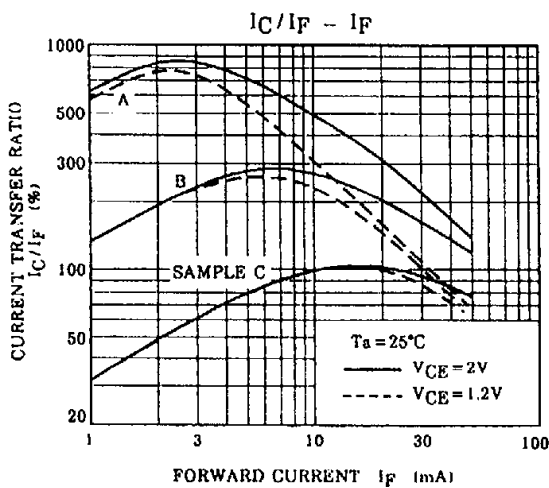
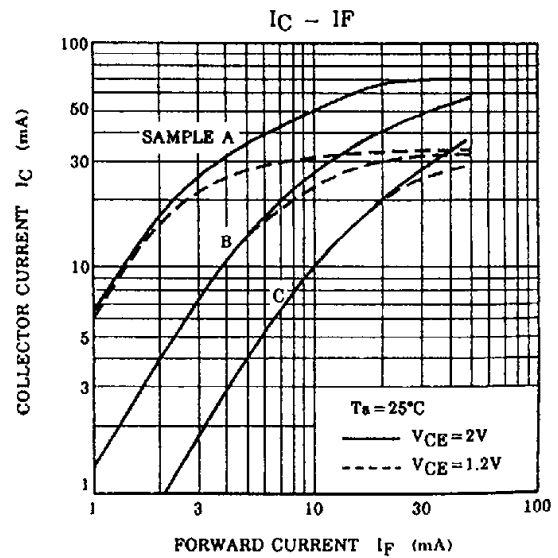
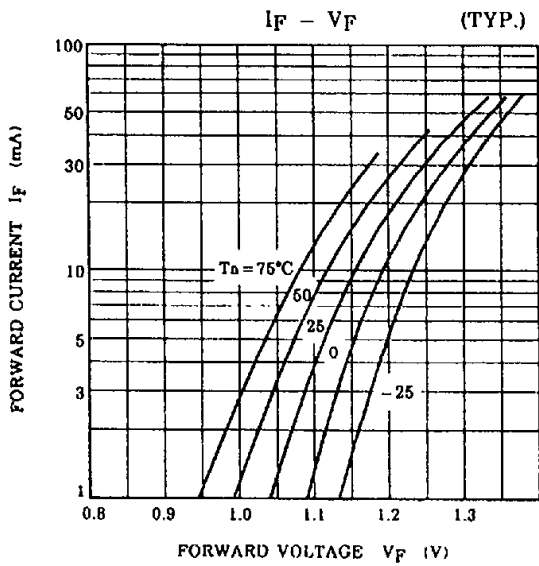
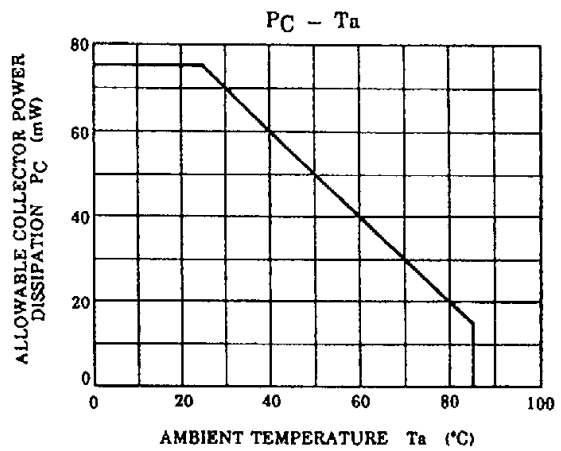
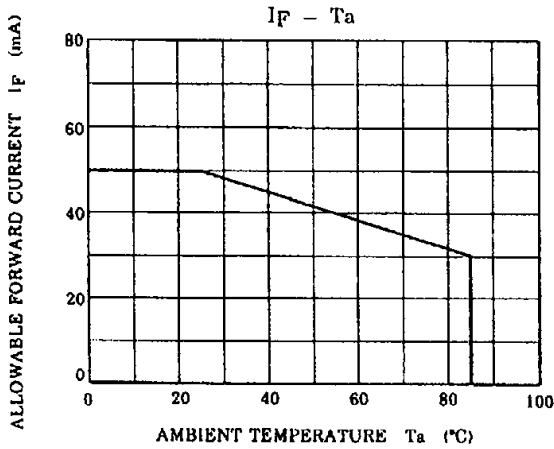


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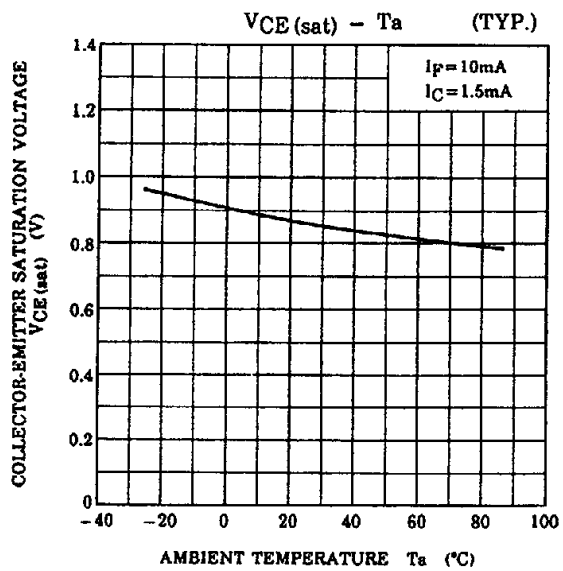
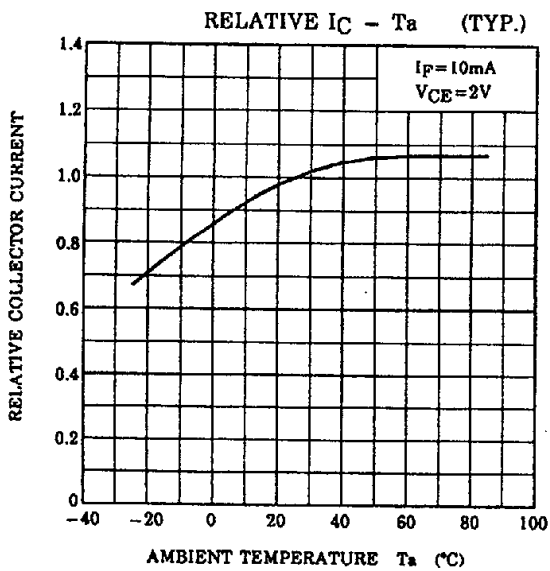
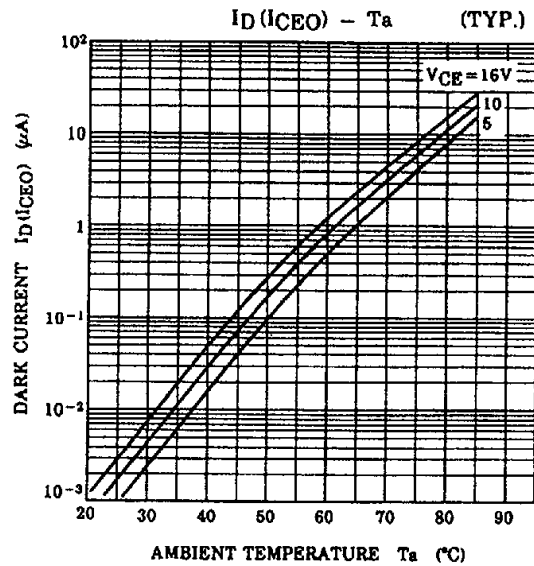
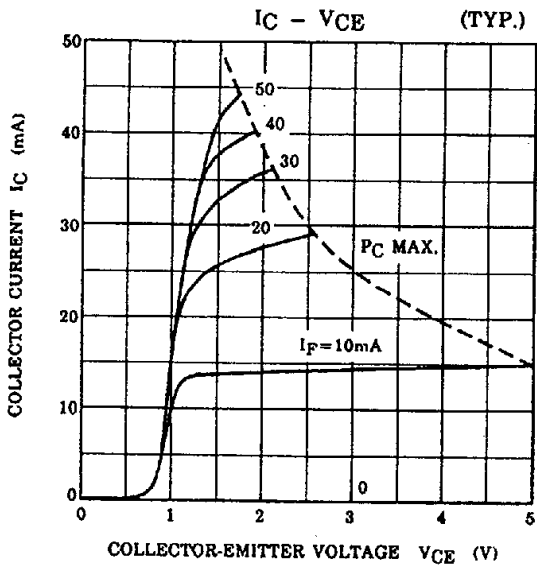


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