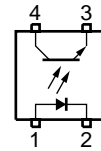
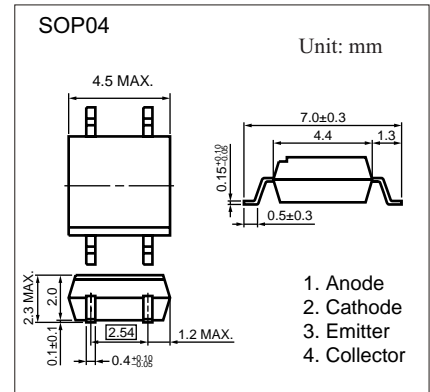


High Isolation Voltage High Collector To Emitter Voltage Type Sop Multi Photocoupler

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■ Features

- High isolation voltage
- High collector to emitter voltage
- High-speed switching



■ Absolute Maximum Ratings Ta = 25°C

Parameter		Symbol	Rating	Unit
Diode	Forward Current (DC)	I _F	50	mA
	Peak Forward Current *1	I _{FP}	1	A
	Reverse Voltage	V _R	6	V
	Power Dissipation	P _D	80	mW
	Power Dissipation Derating	ΔP _D /°C	0.8	mW/°C
Transistor	Collector-emitter voltage	V _{CEO}	120	V
	Emitter-collector voltage	V _{ECO}	6	V
	Collector current	I _C	30	mA
	Collector power dissipation	P _C	150	mW
	Power Dissipation Derating	ΔP _C /°C	1.5	mW/°C
Isolation voltage *2	BV	3750	V _{rms}	
Operating Ambient temperature	T _{opr}	-55 to +100	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

*1 Pulse width=100 μ s, Duty Cycle : 1%

*2 AC voltage for 1 minute at TA = 25 °C, RH = 60 % between input and output

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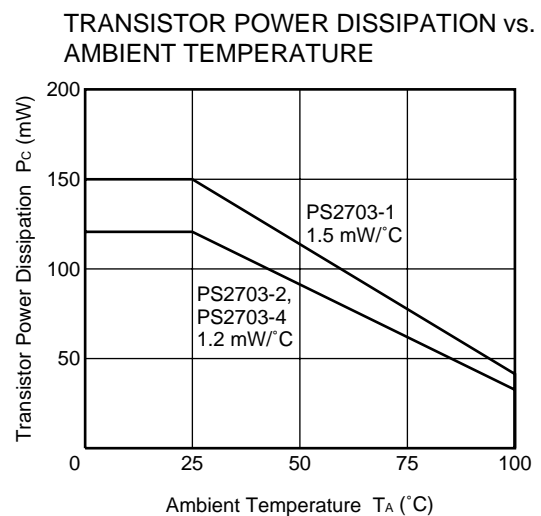
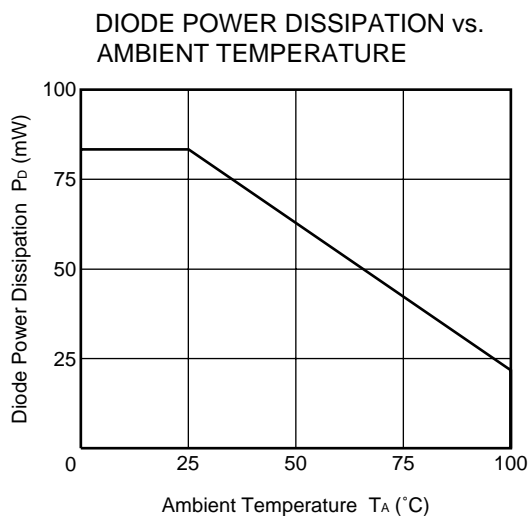
■ Electrical Characteristics Ta = 25°C

Parameter		Symbol	Testconditions	Min	Typ	Max	Unit
Diode	Forward voltage	V _F	I _F = 5mA		1.1	1.4	V
	Reverse current	I _R	V _R = 5V			5	μA
	Terminal capacitance	C _t	V = 0, f = 1MHz		30		pF
Transistor	Collector to Emitter Current	I _{CEO}	V _{CE} = 120V, I _F = 0 mA,			100	nA
Coupled	Current Transfer Ratio (I _c /I _F)	CTR	I _F = 5mA, V _{CE} = 5V	50		400	%
			I _F = 1 mA, V _{CE} = 5 V	10	80		
	Collector Saturation Voltage	V _{CE(sat)}	I _F = 10mA, I _c = 2mA			0.3	V
	Isolation Resistance	R _{i-o}	V _{i-o} = 1 kVDC	10 ¹¹			Ω
	Isolation Capacitance	C _{i-o}	V = 0, f = 1MHz		0.4		pF
	Rise time	t _r	V _{CE} = 5V, I _c = 2mA, R _L = 1KΩ		10		μs
	Fall time	t _f			10		μs

■ CTR rank

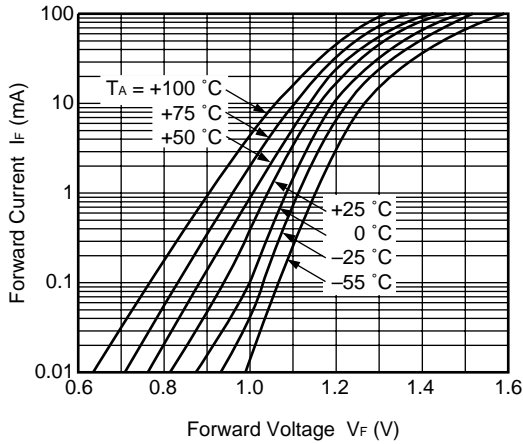
CTR rank	CTR (%)	Conditions
K	200 to 400	I _F = 5 mA, V _{CE} = 5 V
	80 to	I _F = 1 mA, V _{CE} = 5 V
L	100 to 300	I _F = 5 mA, V _{CE} = 5 V
	25 to	I _F = 1 mA, V _{CE} = 5 V
M	50 to 150	I _F = 5 mA, V _{CE} = 5 V
	10 to	I _F = 1 mA, V _{CE} = 5 V

■ TypIacl Characteristics

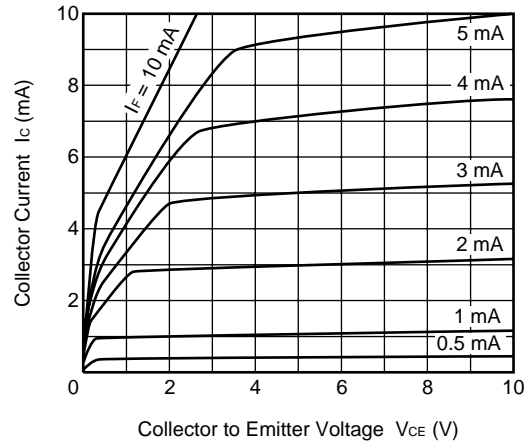


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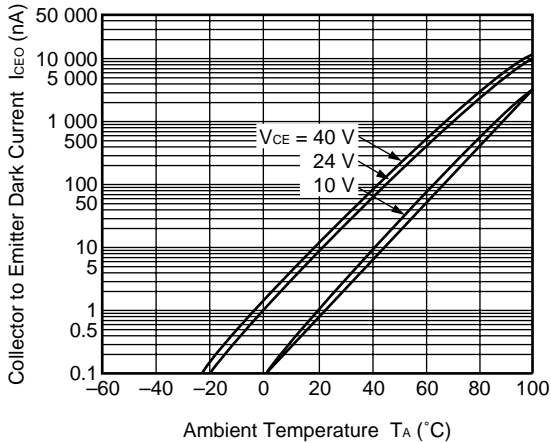
FORWARD CURRENT vs. FORWARD VOLTAGE



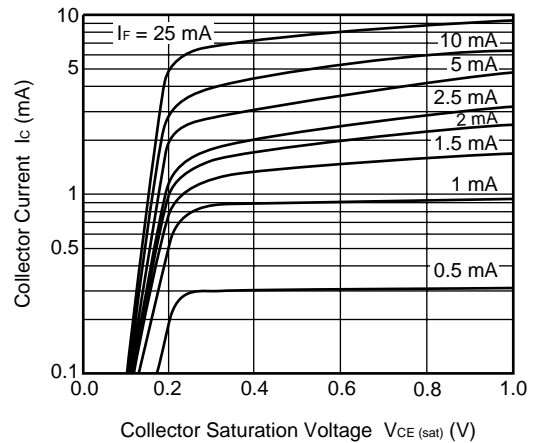
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



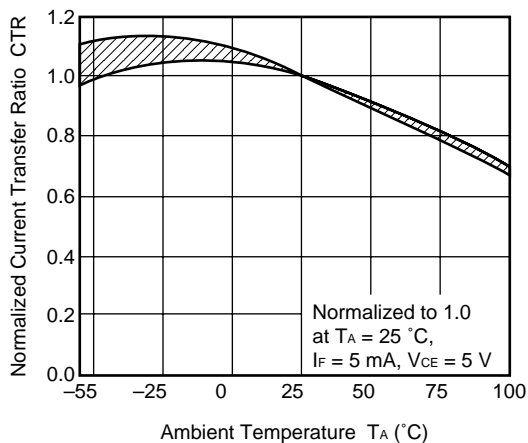
COLLECTOR TO EMITTER DARK CURRENT vs. AMBIENT TEMPERATURE



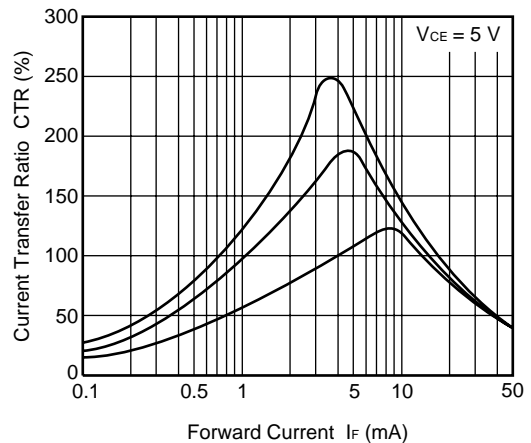
COLLECTOR CURRENT vs. COLLECTOR SATURATION VOLTAGE



NORMALIZED CURRENT TRANSFER RATIO vs. AMBIENT TEMPERATURE

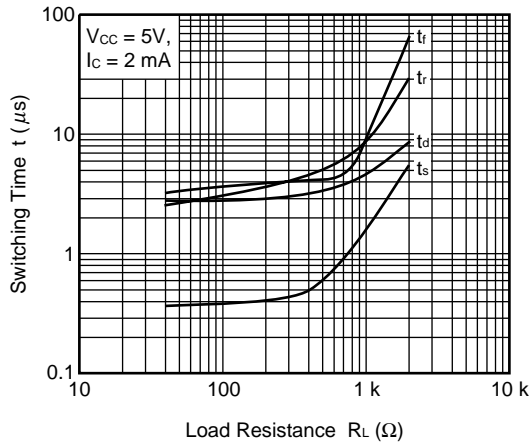


CURRENT TRANSFER RATIO vs. FORWARD CURRENT

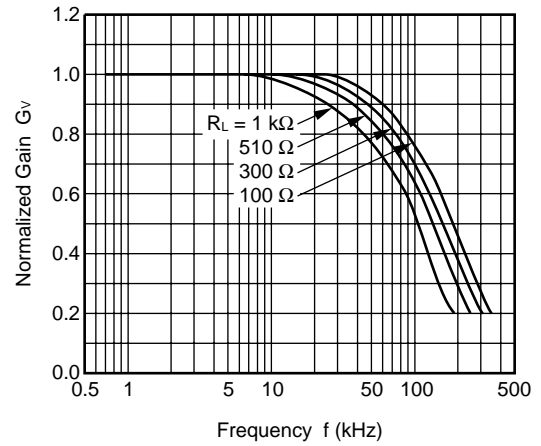


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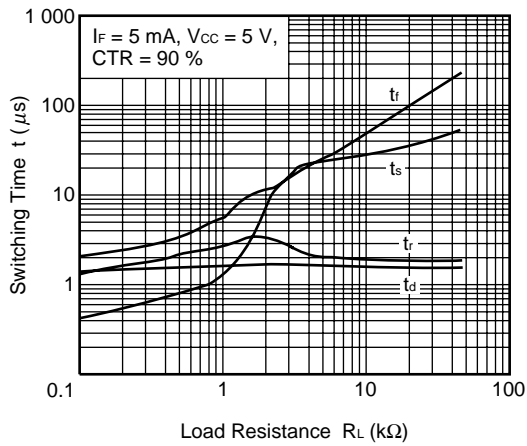
SWITCHING TIME vs. LOAD RESISTANCE



FREQUENCY RESPONSE



SWITCHING TIME vs. LOAD RESISTANCE



LONG TIME CTR DEGRADATION

