

Features

1. Ac inputs.
2. Opaque type, mini-flat package.
3. Subminiature type (The volume is smaller than that of our conventional DIP type by as far as 30%)
4. Isolation voltage between input and output (Viso:3750Vrms).

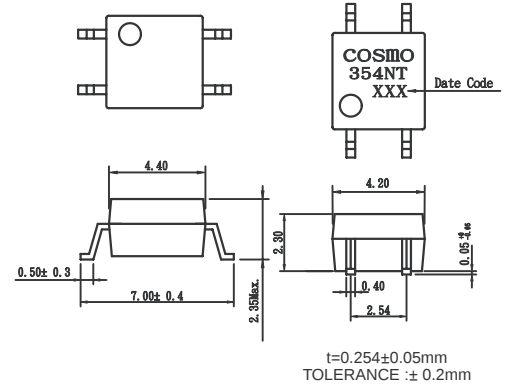
Applications

1. Hybrid substrates that require high density mounting.
2. Programmable controllers.

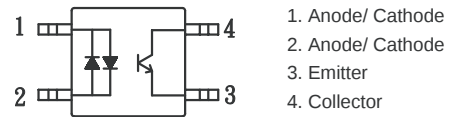
Classification table of current transfer ratio is shown below.

RANK MARK	CTR(%)
A	50 TO 150
B	20 TO 400

Outside Dimension : Unit (mm)



Schematic : Top View



Absolute Maximum Ratings

(Ta=25 °C)

Parameter	Symbol	Rating	Unit
Input	Forward current	IF	± 50
	Peak forward current	IFM	± 1
	Power dissipation	P	70
Output	Collector-emitter voltage	VCEO	60
	Emitter-collector voltage	VECO	5
	Collector current	IC	50
	Collector power dissipation	PC	150
	Total power dissipation	Ptot	170
	Isolation voltage 1 minute	Viso	3750
	Operating temperature	Topr	-30 to +100
	Storage temperature	Tstg	-40 to +125
	Soldering temperature 10 second	Tsol	260

Electro-optical Characteristics

(Ta=25 °C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	VF	—	1.2	1.4	V
	Terminal capacitance	Ct	—	30	250	pF
Output	Collector dark current	ICEO	—	—	0.1	uA
	Collector-emitter breakdown voltage	BVCEO	60	—	—	V
	Emitter- collector breakdown voltage	BVECO	5	—	—	V
Transfer charac- teristics	Current transfer ratio	CTR	20	—	400	%
	Collector-emitter saturation voltage	VCE (sat)	—	0.1	0.3	V
	Isolation resistance	Riso	5X10 ¹⁰	10 ¹¹	—	ohm
	Floating capacitance	Cf	—	0.6	1.0	pF
	Response time (Rise)	tr	—	4	18	us
	Response time (Fall)	tf	—	3	18	us

Fig.1 Forward Current vs. Ambient Temperature

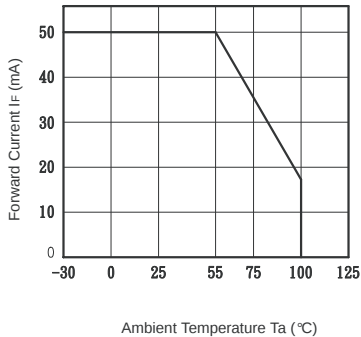


Fig.2 Diode Power Dissipation vs. Ambient Temperature

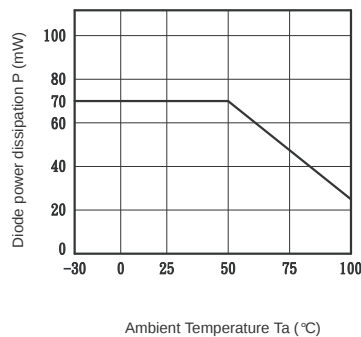


Fig.3 Collector Power Dissipation vs. Ambient Temperature

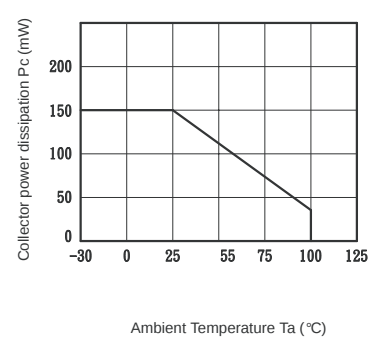


Fig.4 Total Power Dissipation vs. Ambient Temperature

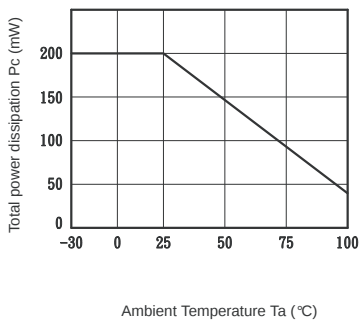


Fig.5 Peak Forward Current vs. Duty Ratio

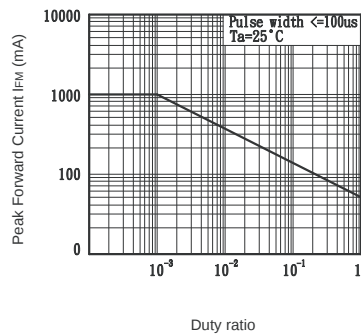


Fig.6 Forward Current vs. Forward Voltage

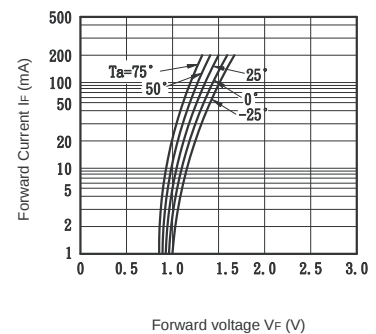


Fig.7 Current Transfer Ratio vs. Forward Current

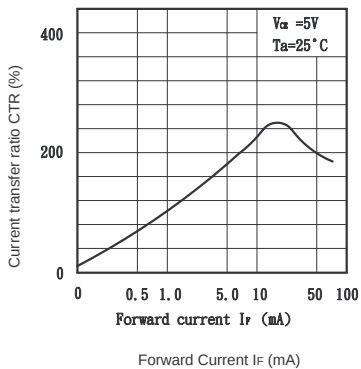


Fig.8 Collector Current vs. Collector-emitter Voltage

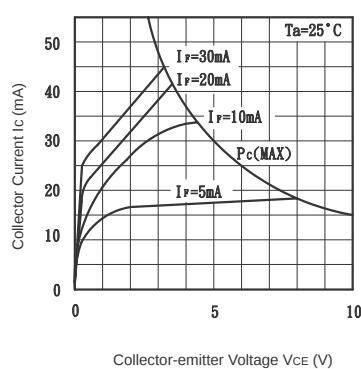


Fig.9 Relative Current Transfer Ratio vs. Ambient Temperature

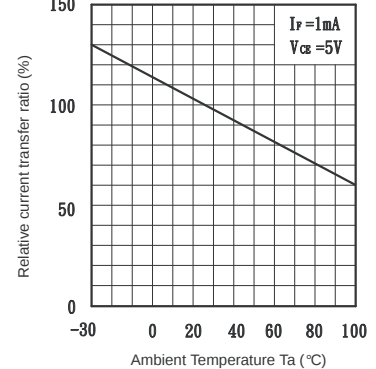


Fig.10 Collector-emitter Saturation Voltage vs. Ambient Temperature

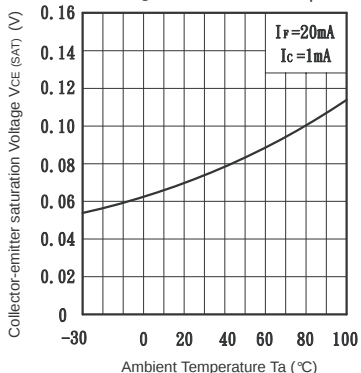


Fig.11 Collector Dark Current vs. Ambient Temperature

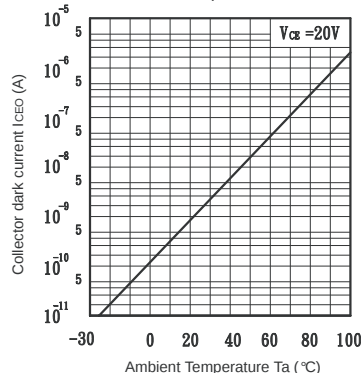


Fig.12 Response Time vs. Load Resistance

