



Features

1. AC inputs.
2. Opaque type, SOP 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: 3750V_{RMS})

Part Numbering System: Page 2. **Part Marking System:** Page 4.

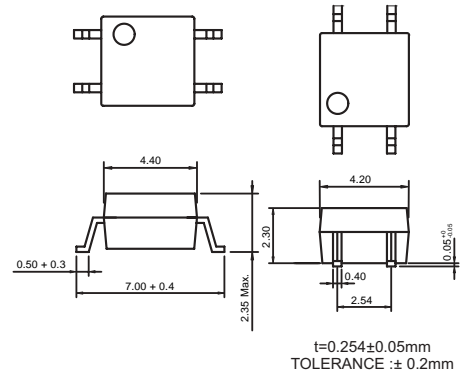
Applications

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

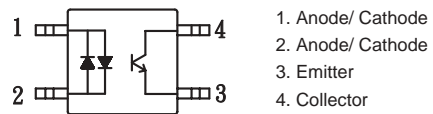
Classification table of current transfer ratio is shown below.

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	I _F	± 50	mA
	Peak forward current	I _{FM}	± 1	A
	Power dissipation	P	70	mW
Output	Collector-emitter voltage	V _{CEO}	60	V
	Emitter-collector voltage	V _{ECO}	5	V
	Collector current	I _C	50	mA
	Collector power dissipation	P _C	150	mW
Total power dissipation		P _{tot}	170	mW
Isolation voltage 1 minute		Viso	3750	V _{rms}
Operating temperature		Topr	-30 to +100	°C
Storage temperature		Tstg	-40 to +125	°C
Soldering temperature 10 second		Tsol	260	°C

Electro-optical Characteristics

(Ta=25°C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V _F	I _F = ± 20mA	—	1.2	1.4	V
	Terminal capacitance	C _t	V = 0, f = 1kHz	—	30	250	pF
Output	Collector dark current	I _{CEO}	V _{CE} = 20V, I _F = 0	—	—	0.1	uA
	Collector-emitter breakdown voltage	BV _{CEO}	I _C = 0.1mA, I _F = 0	60	—	—	V
	Emitter-collector breakdown voltage	BV _{ECO}	I _E = 100uA, I _F = 0	5	—	—	V
Transfer characteristics	Current transfer ratio	CTR	I _F = ± 1mA, V _{CE} = 5V	20	—	400	%
	Collector-emitter saturation voltage	V _{CE (sat)}	I _F = ± 20mA, I _C = 1mA	—	0.1	0.3	V
	Isolation resistance	R _{iso}	DC500V, 40 to 60%RH	5X10 ¹⁰	10 ¹¹	—	ohm
	Floating capacitance	C _f	V = 0, f = 1MHz	—	0.6	1.0	pF
	Response time (Rise)	t _r	V _{CE} = 2V, I _C = 2mA, R _L = 100ohm	—	4	18	us
	Response time (Fall)	t _f		—	3	18	us

