

Features

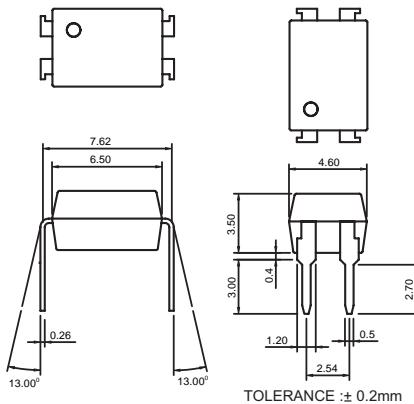
1. Current transfer ratio.
(CTR: MIN. 60% at $I_F = \pm 1\text{mA}$ $V_{CE} = 5\text{V}$)
2. High isolation voltage between input and output.
(Viso: 5000VRMS)
3. Compact dual-in-line package.
4. AC input.
5. Available package types: DIP(shown)/ SMD / H (Page 150).

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

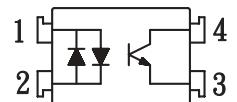
Applications

1. Programmable controller applications for low input photo couplers and high V_{CEO} photo couplers.
2. Telephone sets, telephone exchangers.
3. System appliances, limit switches, sensors thermostats, and transducers, etc.
4. Signal transmission between circuits of different potentials and impedances.

Outside Dimension: Unit (mm)



Schematic: Top View



1. Anode, Cathode
2. Anode, Cathode
3. Emitter
4. Collector

Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Input	IF	±60	mA
	IFM	±1	A
	Pd	70	mW
Output	VCEO	60	V
	VECO	6	V
	Ic	50	mA
	Pc	150	mW
Total power dissipation	Ptot	200	mW
Isolation voltage 1 minute	Viso	5000	Vrms
Operating temperature	Topr	-30 to +100	°C
Storage temperature	Tstg	-55 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	VF	IF =± 20mA	—	1.2	1.4 V
	Peak forward voltage	VFM	IFM =± 0.5A	—	—	3.0 V
	Terminal capacitance	Ct	V=0, f=1kHz	—	30	— pF
Output	Collector dark current	ICEO	$V_{CE} = 20\text{V}$, $IF = 0$	—	—	0.1 uA
Transfer characteristics	Current transfer ratio	CTR	$IF = \pm 1\text{mA}$, $V_{CE} = 5\text{V}$	60	—	600 %
	Collector-emitter saturation voltage	VCE (sat)	$IF = \pm 20\text{mA}$, $Ic = 1\text{mA}$	—	0.1	0.3 V
	Isolation resistance	Riso	DC500V	5×10^{10}	10^{11}	— ohm
	Floating capacitance	Cf	V=0, f=1MHz	—	0.6	1.0 pF
	Cut-off frequency	fc	$V_{CC} = 5\text{V}$, $Ic = 2\text{mA}$, $RL = 100\text{ohm}$	—	80	— kHz
	Response time (Rise)	tr	$V_{CE} = 2\text{V}$, $Ic = 2\text{mA}$, $RL = 100\text{ohm}$	—	5	20 us
	Response time (Fall)	tf		—	4	20 us

Classification table of current transfer ratio is shown below.

Model NO.	Rank mark	CTR (%)
A11064	A	60 TO 600
A11064	B	60 TO 300

Fig.1 Current Transfer Ratio vs. Forward Current

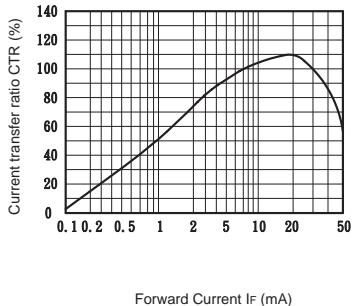


Fig.2 Collector Power Dissipation vs. Ambient Temperature

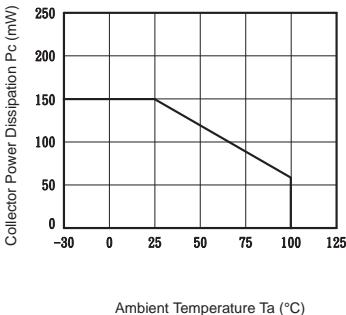


Fig.3 Collector Dark Current vs. Ambient Temperature

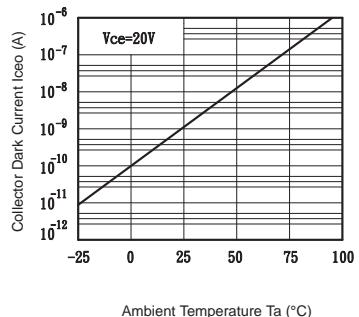


Fig.4 Forward Current vs. Ambient Temperature

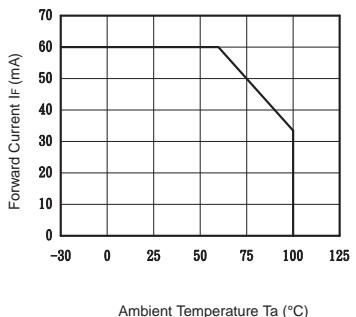


Fig.5 Forward Current vs. Forward Voltage

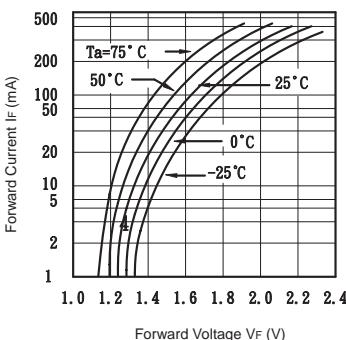


Fig.6 Collector Current vs. Collector-emitter Voltage

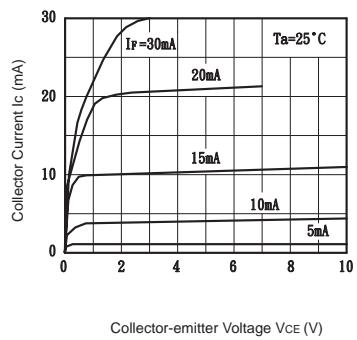


Fig.7 Relative Current Transfer Ratio vs. Ambient Temperature

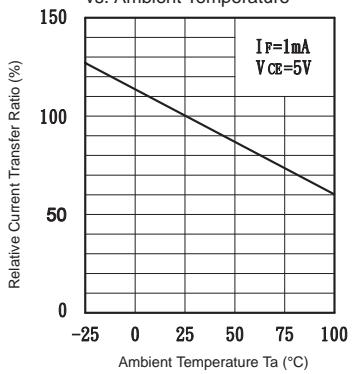


Fig.8 Collector-emitter Saturation Voltage vs. Ambient Temperature

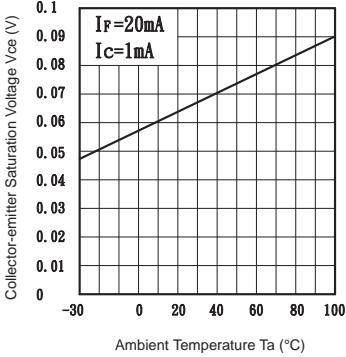


Fig.9 Collector-emitter Saturation Voltage vs. Forward Current

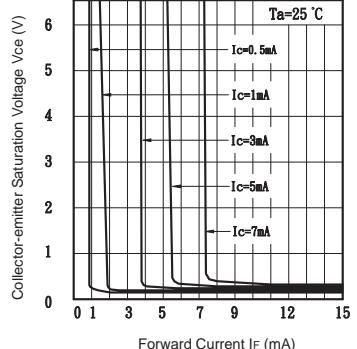


Fig.10 Response Time vs. Load Resistance

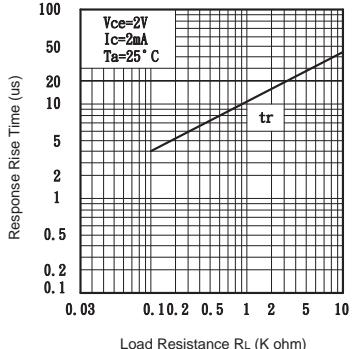


Fig.11 Response Time vs. Load Resistance

