

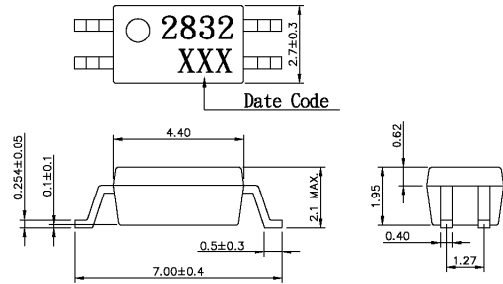
Features

1. High isolation voltage (BV=2500 Vrms)
2. Small and thin package (4pin SOP, Pin pitch 1.27 mm)
3. High collector to emitter voltage (VCE0=300V)
4. High current transfer ratio
(CTR=2000% TYP. @ IF=1mA, VCE=2V)

Applications

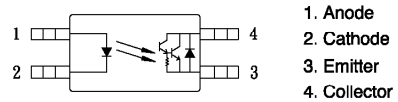
1. Hybrid IC
2. Telephone/Telegraph Receiver
3. FAX

Outside Dimension:Unit (mm)



TOLERANCE : ± 0.2mm

Schematic:Top View



Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Input	Forward current (DC)	IF	50 mA
	Reverse voltage	VR	6 V
	Power dissipation derating	Pd/°C	0.6 mW / °C
	Power dissipation	Pd	60 mW
	Peak forward current *1	IFP	1 A
Output	Collector-emitter voltage	VCEO	300 V
	Emitter-collector voltage	VECO	0.3 V
	Collector current	IC	60 mA
	Power dissipation derating	Pc/°C	1.2 mW / °C
	Total power dissipation	Pc	120 mW
Isolation voltage *2	Viso	2500 Vrms	
Operating temperature	Topr	-30 to +100 °C	
Storage temperature	Tstg	-55 to +150 °C	

*1 PW=100 s, duty cycle=1%

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

Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	IF=10mA	—	1.1	1.4	V
	Reverse current	VR=5V	—	—	5	μA
	Terminal capacitance	V=0V, f=1.0MHz	—	30	—	pF
Output	Collector-emitter dark current	VCE=300V, IF=0mA	—	—	400	nA
	Current transfer ratio (IC / IF)	IF=1mA, VCE=2V	400	2000	—	%
	Collector saturation voltage	IF=1mA, IC=2mA	—	—	1.0	V
	Isolation resistance	VI-o=500VDC	5X10 ¹⁰	10 ¹¹	—	ohm
	Floating capacitance	V=0V, f=1.0MHZ	—	0.4	—	pF
	Response time (Rise)*1	VCE=5V, IC=10mA, RL=100ohm	—	40	—	μS
Response time (Fall)*1	—		10	—	μS	

*1 Test circuit for switching time

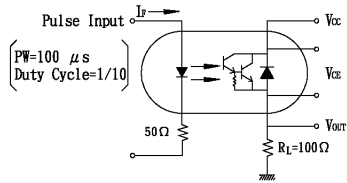


Fig.1 Current Transfer Ratio vs. Forward Current

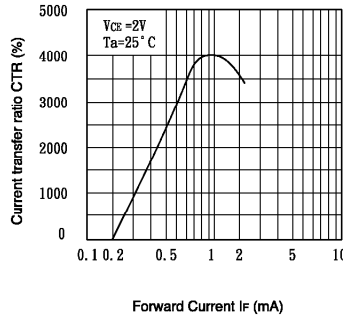


Fig.2 Collector Power Dissipation vs. Ambient Temperature

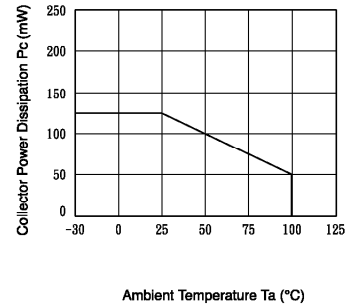


Fig.3 Collector Dark Current vs. Ambient Temperature

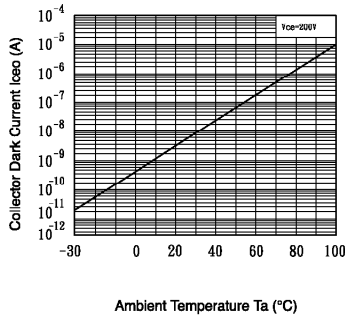


Fig.4 Forward Current vs. Ambient Temperature

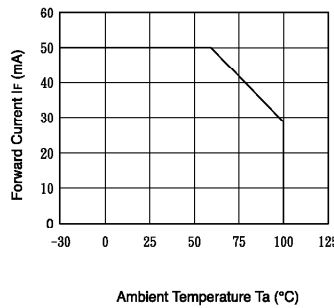


Fig.5 Forward Current vs. Forward Voltage

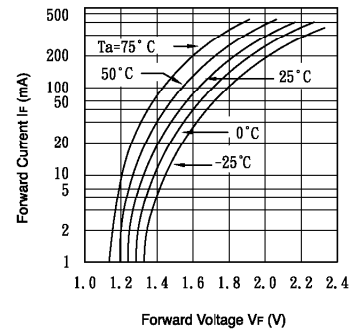


Fig.6 Collector Current vs. Collector-emitter Voltage

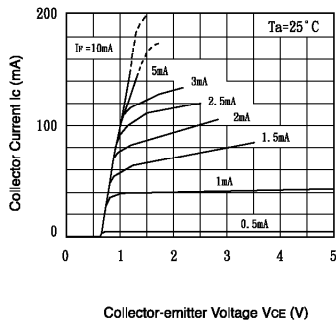


Fig.7 Collector-emitter Saturation Voltage vs. Forward Current

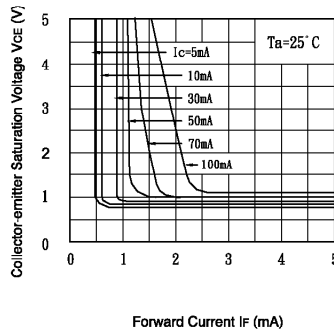


Fig.8 Relative Current Transfer Ratio vs. Ambient Temperature

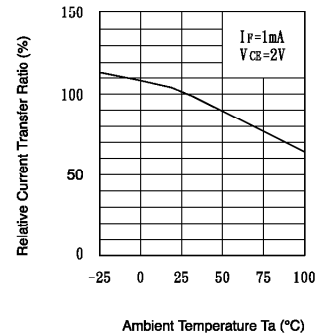


Fig.9 Response Time vs. Load Resistance

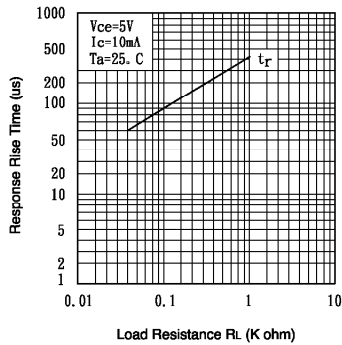


Fig.10 Response Time vs. Load Resistance

