

Date code (2 digit)

1st digit		2nd digit	
Year of production		Month of production	
A.D.	Mark	Month	Mark
2000	0	1	1
2001	1	2	2
2002	2	3	3
2003	3	4	4
2004	4	5	5
2005	5	6	6
2006	6	7	7
2007	7	8	8
2008	8	9	9
2009	9	10	X
2010	0	11	Y
:	:	12	Z

repeats in a 10 year cycle

Country of origin

Japan, Indonesia or Philippines
(Indicated on the packing case)

■ Absolute Maximum Ratings

(T_a=25°C)

	Parameter	Symbol	Rating	Unit
Input	*1 Forward current	I _F	50	mA
	*1, 2 Peak forward current	I _{FM}	1	A
	Reverse voltage	V _R	6	V
	Power dissipation	P	75	mW
Output	Supply voltage	V _{CC}	-0.5 to +17	V
	Output current	I _O	50	mA
	Power dissipation	P _O	250	mW
	Operating temperature	T _{opr}	-25 to +85	°C
	Storage temperature	T _{stg}	-40 to +100	°C
	*3 Soldering temperature	T _{sol}	260	°C

*1 The derating factors of absolute maximum ratings due to ambient temperature are shown in Fig. 1, 2, 3

*2 Pulse width ≤ 100μs, Duty ratio=0.01

*3 For 5s or less

■ Electro-optical Characteristics

(T_a=25°C)

	Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V _F	I _F =5mA	–	1.1	1.4	V
	Reverse current	I _R	V _R =3V	–	–	10	μA
Output	Operating supply voltage	V _{CC}	–	4.5	–	17	V
	Low level output voltage	V _{OL}	V _{CC} =5V, I _{OL} =16mA, I _F =0	–	0.15	0.4	V
	High level output voltage	V _{OH}	V _{CC} =5V, I _F =5mA	4.9	–	–	V
	Low level supply current	I _{CCL}	V _{CC} =5V, I _F =0	–	1.7	3.8	mA
	High level supply current	I _{CCH}	V _{CC} =5V, I _F =5mA	–	0.7	2.2	mA
Transfer characteristics	*4 "Low→High" threshold input current	I _{FLH}	V _{CC} =5V	–	1	5	mA
	*5 Hysteresis	I _{FHL} /I _{FLH}	V _{CC} =5V	0.55	0.75	0.95	–
	*6 Response time	"Low→High" Propagation delay time	V _{CC} =5V, I _F =5mA, R _L =280Ω	–	3	9	μs
		"High→Low" Propagation delay time		–	5	15	
		Rise time		–	0.1	0.5	
		Fall time		–	0.05	0.5	

*4 I_{FLH} represents forward current when output goes from "Low" to "High".

*5 I_{FHL} represents forward current when output goes from "High" to "Low".

*6 Test circuit for response time is shown in Fig.12.