

**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

## ■ Absolute Maximum Ratings (T<sub>a</sub>=25°C)

Parameter		Symbol	Rating	Unit
Input	*1 Forward current	I <sub>F</sub>	50	mA
	*1, 2 Peak forward current	I <sub>FM</sub>	1	A
	Reverse voltage	V <sub>R</sub>	6	V
	Power dissipation	P	75	mW
Output	Collector-emitter voltage	V <sub>CEO</sub>	35	V
	Emitter-collector voltage	V <sub>ECO</sub>	6	V
	Collector current	I <sub>C</sub>	40	mA
	*1 Collector power dissipation	P <sub>C</sub>	75	mW
Operating temperature		T <sub>opr</sub>	-25 to +85	°C
Storage temperature		T <sub>stg</sub>	-40 to +100	°C
*3 Soldering temperature		T <sub>sol</sub>	260	°C

\*1 Refer to Fig. 1, 2, 3

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

\*3 For 5s or less

## ■ Electro-optical Characteristics (T<sub>a</sub>=25°C)

Parameter		Symbol	Condition	MIN.	TYP.	MAX.	Unit	
Input	Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	1.25	1.4	V	
	Peak forward voltage	V <sub>FM</sub>	I <sub>FM</sub> =0.5A	-	3	4	V	
	Reverse current	I <sub>R</sub>	V <sub>R</sub> =3V	-	-	10	μA	
Output	Collector dark current	I <sub>CEO</sub>	V <sub>CE</sub> =10V	-	-	1	μA	
Transfer characteristics	Collector current	I <sub>C</sub>	V <sub>CE</sub> =2V, I <sub>F</sub> =1mA	0.5	-	20	mA	
	Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>F</sub> =2mA, I <sub>C</sub> =0.5mA	-	-	1	V	
	Response time	Rise time	t <sub>r</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =2mA, R <sub>L</sub> =100Ω	-	80	400	μs
		Fall time	t <sub>f</sub>		-	70	350	