

LOW-FREQUENCY CRYSTAL OSCILLATOR

SG -3032JC

Preliminary

- Built-in crystal unit allows adjustment-free efficient operation.
- A general-purpose SMD
- Operating voltage **1.8 to3.6V**

■ Specifications

1. Absolute Max. Rating

Item	Symbol	Min.	Typ.	Max.	Unit	Remarks
Power source voltage	V _{DD}	GND - 0.3		V _{DD} + 0.3	V	V _{DD} -GND
Input voltage	V _{IN}	GND - 0.3		V _{DD} + 0.3	V	V _{DD} -GND
Storage temperature	T _{STG}	-55		+125	°C	
Operating Temperature	T _{OPR}	- 40		+85	°C	
Soldering condition	T _{SOL}	Twice at under 260 °C within 10 sec. or under 230 °C within 3 min.				

2. Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit	Remarks
Output Frequency	f _o		32.768		kHz	
Power source voltage	V _{DD}	1.8		3.6	V	
Frequency stability	Δf / f _o	-20	5	30	ppm	+25°C, V _{DD} =3.3V
Current consumption	I _{DD}		3		μA	No load V _{DD} =3.3V
Duty	tw/t	40	50	60	%	V _{DD} /2 level
Output voltage	V _{OH}			V _{DD} -0.4	V	I _{OH} = -0.5mA
	V _{OL}	0.4			V	I _{OL} = 0.5mA
Output rise time , fall time	t _r , t _f			100	ns	20% to 80% V _{DD}
Oscillation start up time	t _{STA}			3	s	
Aging	f _a	- 5		5	ppm/Year	

■ External dimensions

(Unit: mm)

