

SM7050-6

Features:

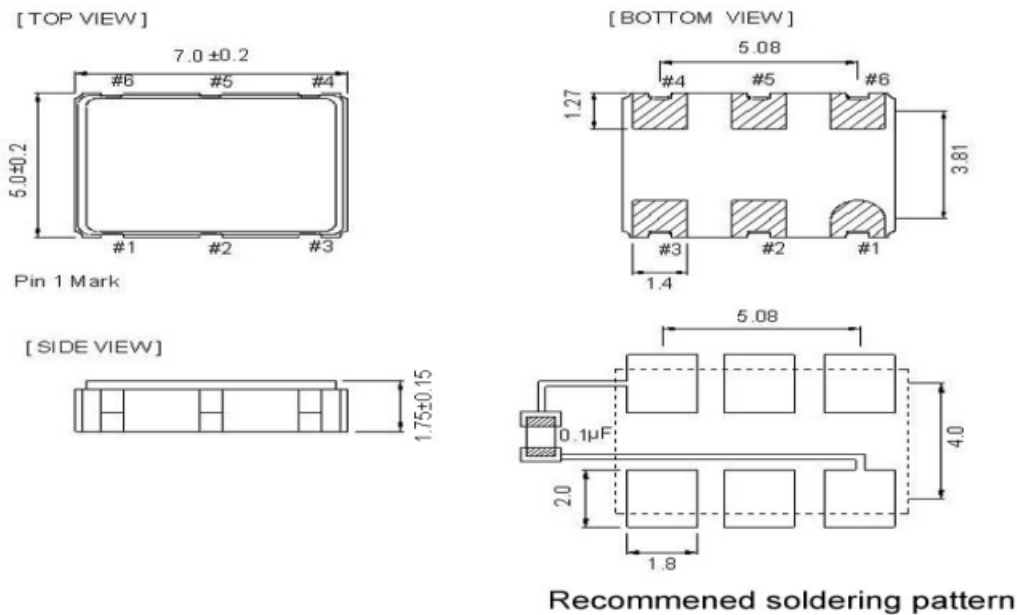
- 3.3V Operation / Complementary LVPECL Output
- Enable / Disable Function (6-Pad)
- Main application: WLAN, SONET/SDH/DWDM, Gigabite Ethernet, Storage Area Network, Digital Video
- Surface mount 5.0mmx7.0mm crystal oscillator
- Moisture Sensitivity Level (MSL) : Level-1

Electrical Specifications:

Characteristics	Units	Minimum	Typical	Maximum
Center Frequency	MHz		122.88	
Storage Temperature Range	°C	-50		125
Operating Temperature Range	°C	-40		85
Frequency Stability Operating Temperature Range	ppm	+/-50		
Input Voltage (Operating Vdd)	VDC		3.3 +/-5%	
Current Consumption	mA		-	30
Output	LVPECL			
Load	ohm		15	
Duty Cycle	%	45%	5-%	55%
Rise Time (10%→90% VDD)	nSec			3.0
Fall Time (90%→10% VDD)	nSec			3.0
Start-up Time	mSec			3
Pullability (Vcont : 1.65V ±1.35V)	ppm	+/-100		
Absolute Pull Range	ppm	+/-50		
Linearity	%			10
Modulation Bandwidth	kHz	25		
Aging (@25°C/year)	ppm	-3.0		+3.0
Phase Jitter (@12kHz to 20MHz)	ps			0.3
Phase Noise 100Hz 1kHz 10kHz 100kHz	dBc/Hz		-90 -120 -130 -140	
Package size		SMD7.0x5.0x1.75 mm		

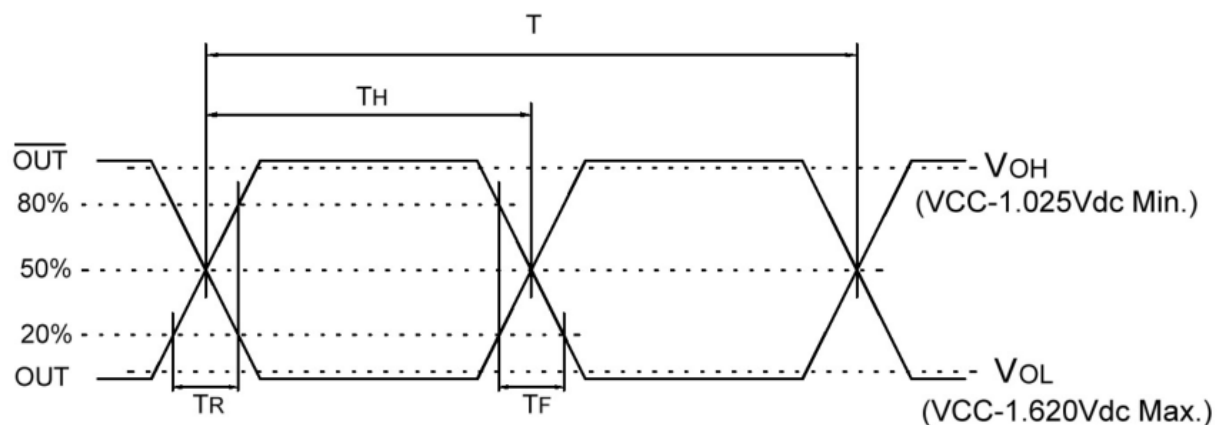
Mechanical Dimensions (mm):

Unit:mm



Pin	Function
#1	Vcon
#2	Tri-State
#3	GND
#4	Output
#5	Comp. Output
#6	VDD

Output Wave form



Marking:

Line 1 : Frequency (122.880)

Line 2 : $\oplus$ XDXX Product Code + Date Code + Internal Traceability Code (XX) : Can be 1 or 2 letters)



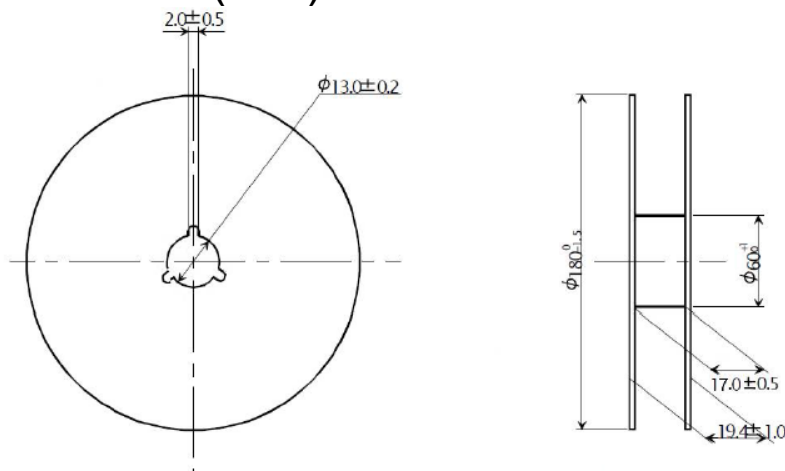
Product Code Table

Year	2017	2018	2019	2020
	2021	2022	2023	2024
	2025	2026	2027	2028
Product code	X	x	<u>X</u>	<u>x</u>

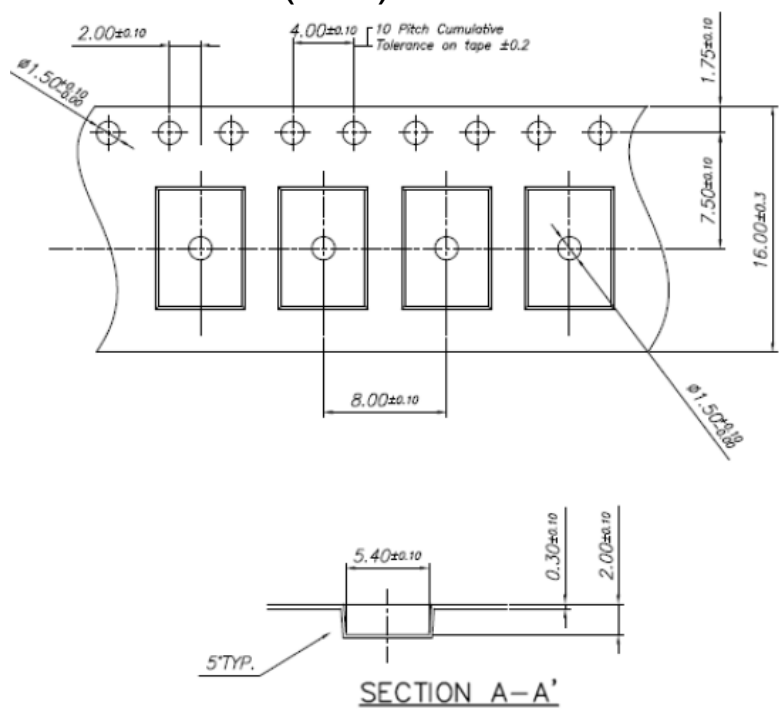
Date Code Table

Date Code Table												
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

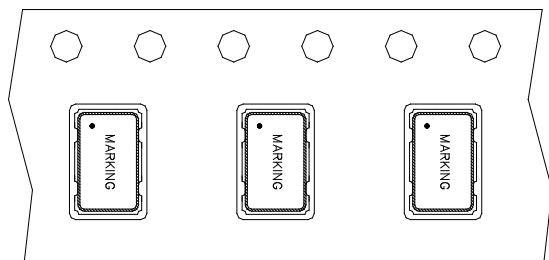
Reel Dimensions (mm):



Tape Dimensions (mm):

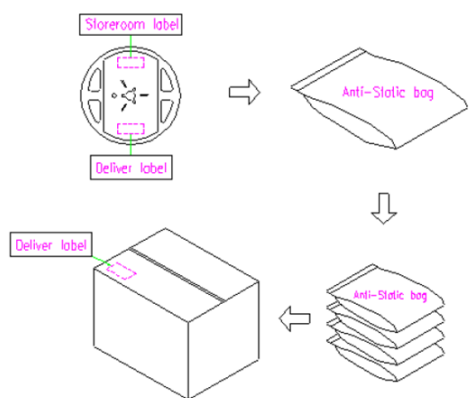


Packing direction:

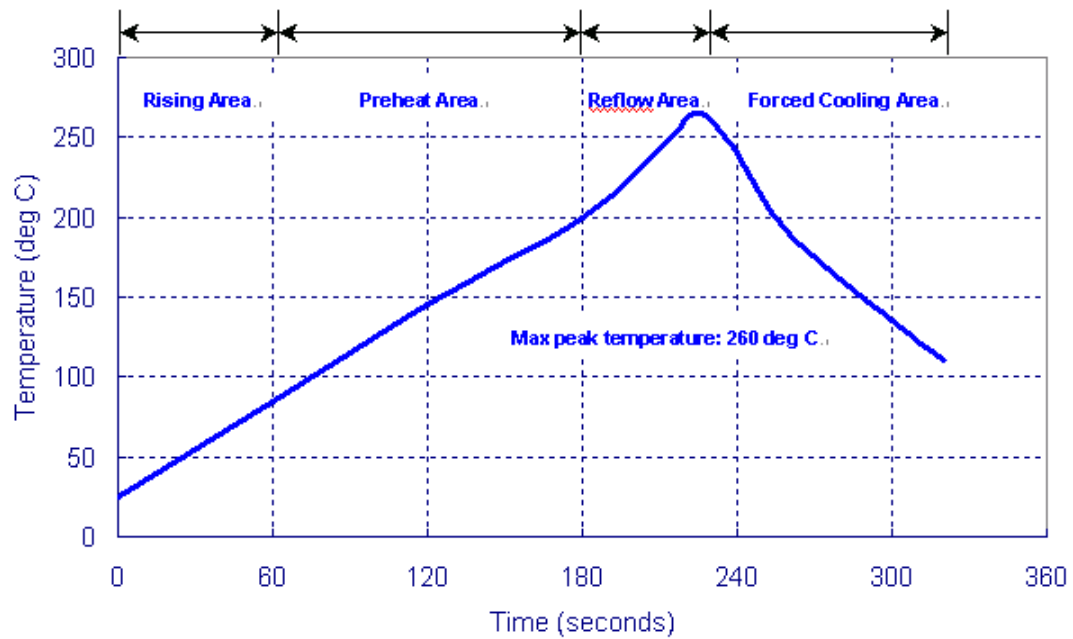


Packing Quantity/Packing:
1K pcs maximum per reel

Packing Quantity/Packing:



Reflow Profile:



Note: 1. Max peak temperature: 260+/-5 deg C; Time: 10+/-2 sec
2. Temperature: 217+/-5 deg C; Time: 90~100 sec

Reliability Specifications

Test name	Test process / method	Reference standard
Mechanical characteristics		
resistance to Soldering heat (IR reflow)	Temp./ Duration : 265°C /10sec ×2 times Total time : 4min.(IR-reflow)	EIAJED-4701 -300(301)M(II)
Vibration	Total peak amplitude : 1.5mm Vibration frequency : 10 to 2000 Hz Sweep period : 20 minute Vibration directions : 3 mutually perpendicular Duration : 2 hr / direc.	MIL-STD 202G method 204
Mechanical Shock	directions : 3 impacts per axis Acceleration : 3000g's, +20/-0 % Duration : 0.3 ms (total 18 shocks) Waveform : Half-sine	MIL-STD 202G method 213
Solderability	Solder Temperature:265±5°C Duration time: 5±0.5 seconds.	J-STD-002
Environmental characteristics		
Thermal Shock	Heat cycle conditions -40 °C (30min) ↔ 85 °C (30min) * cycle time : 10 times	MIL-STD 883G method 1010.8
Humidity test	Temperature : 85 ± 2 °C Relative humidity : 85% Duration : 96 hours	MIL-STD 202G method 103
Dry heat (Aging test)	Temperature : 125 ± 2 °C Duration : 168 hours	MIL-STD 202G method 108A
Cold resistance (Low Temp Storage)	Temperature : -40 ± 2 °C Duration : 96 hours	IEC 60068-2-1



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.