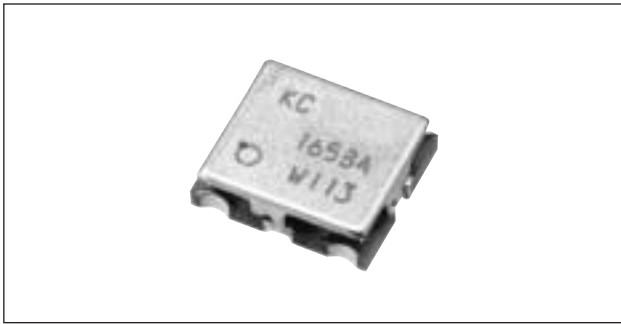


# Voltage Controlled Oscillators



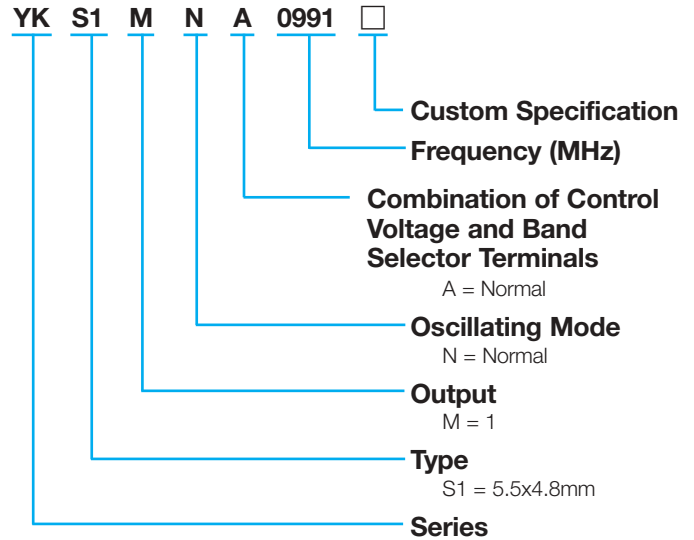
## YKS1 Series



### FEATURES

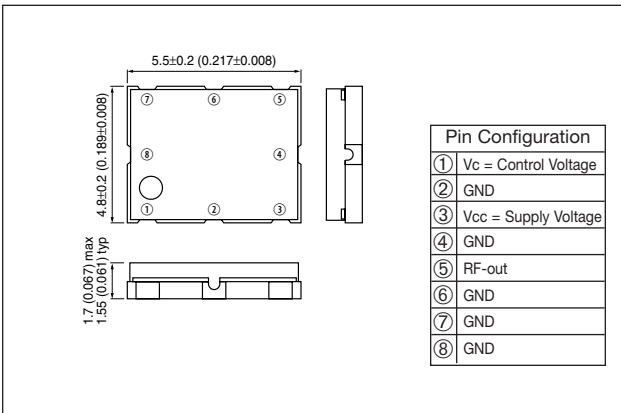
- Small and low profile
- Frequency 700MHz to 2.5GHz available
- Application for UMTS, AMPS(CDMA), PCS, PDC, PHS

### HOW TO ORDER



### DIMENSIONS

millimeters (inches)

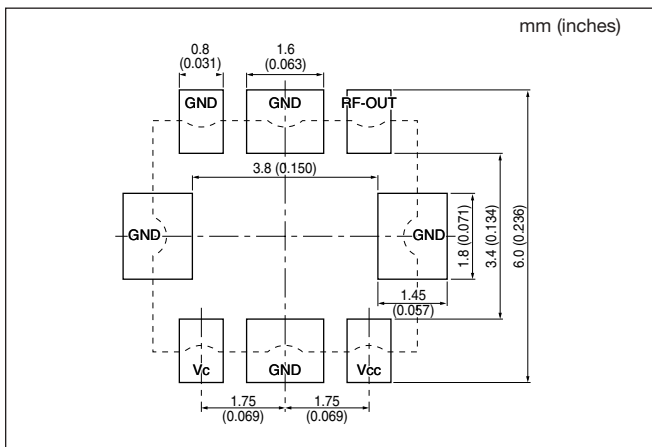


### SPECIFICATIONS

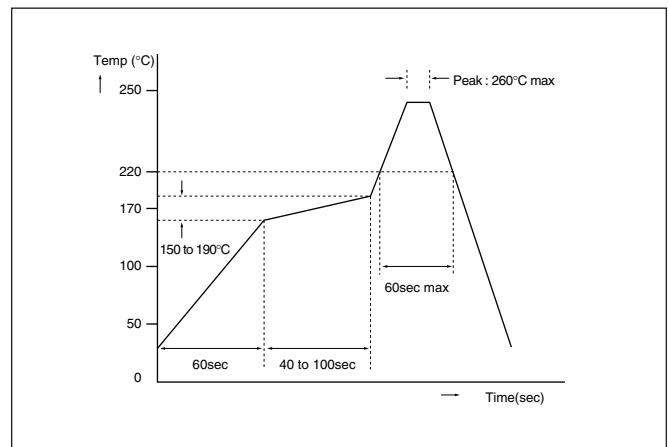
Part Number	System	Function	Frequency MHz	Vcc (V)	Icc (mA)	Po (dBm)	fru (MHz/V)	C/N (dBC/Hz)
YKS1MNA0991*	AMPS(CDMA)	RF	978 to 1004	2.45±0.10	≤8.0	-1.5±3	27±4	≥117@60kHz ≥140@900kHz
YKS1MNA2070*	PCS	RF	2039 to 2100	2.45±0.10	≤9.5	-1.5±3	60±10	≥137@1.25MHz
YKS1MNA1668*	PHS	RF	1649.5 to 1686.5	2.80±0.40	≤6.0	≥-7	45±7	≥125@600kHz

Vcc: Power supply Icc: Current consumption Po: Output level fru: Tuning voltage sensitivity Top: Operating temperature range

### RECOMMENDED LAND PATTERN



### RECOMMENDED REFLOW PROFILE



# Voltage Controlled Oscillators



## YK509 Series



### FEATURES

- For Dualband Offset Solution
- Dual high power signal output
- Small Size (8.7x6.7mm)

### HOW TO ORDER

YK 509 M D B 1390M2139 A

Custom Specification

Frequency (MHz)

Frequency Band 1  
Frequency Band 2

Combination of Control Voltage and Band Selector and Power Save Terminals

	Vc	Band Select	Power Save	Vc	Band Select	Power Save
A	1	0	-	E	2	-
B	1	1	-	F	1	Low/Active
C	1	2	-	G	1	High/Active
D	2	1	-	H	1	High/Active

Oscillating Mode

S = Shift W = Doubler  
N = Normal D = 2 Resonator

Output

M = 1 D = 2

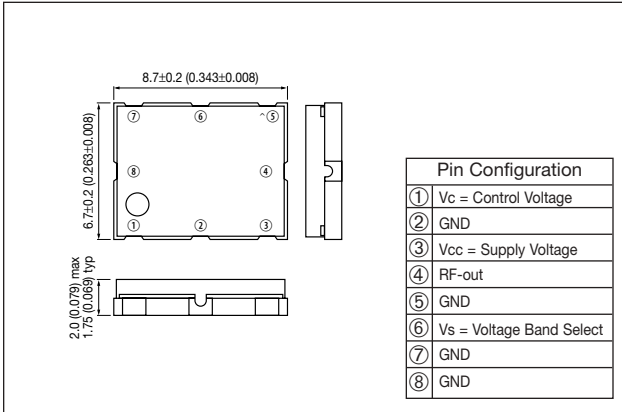
Type

509 = 8.7x6.7mm

Series

### DIMENSIONS

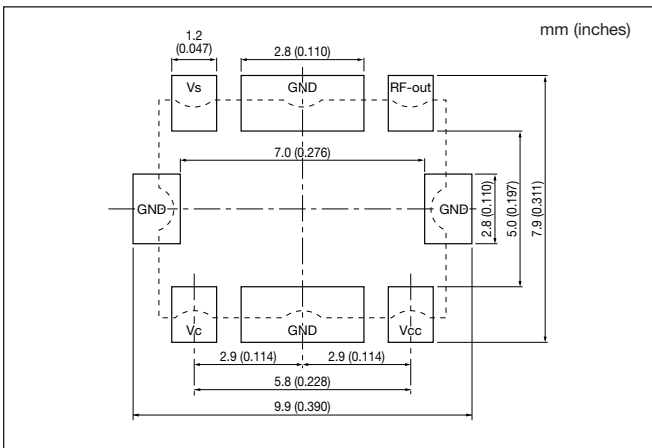
millimeters (inches)



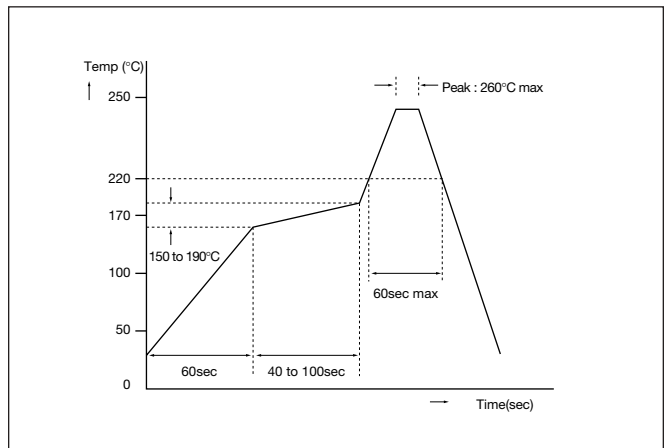
### SPECIFICATIONS

Part Number	System	Function	Frequency MHz	Vcc (V)	Icc (mA)	Po (dBm)	f <sub>ru</sub> (MHz/V)	C/N (dBC/Hz)
YK509MDB1390M2139*	GPS	RF	1385 to 1396	2.80±0.10	≤15	0 typ	14±3	≥90@10kHz ≥139@1.25MHz
	AMPS/PCS	RF	2104 to 2174	2.80±0.10	≤15	0 typ	50±10	≥112@60kHz ≥118@120kHz

### RECOMMENDED LAND PATTERN



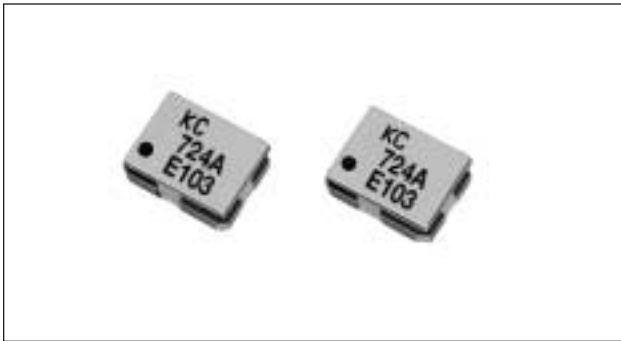
### RECOMMENDED REFLOW PROFILE



# Voltage Controlled Oscillators

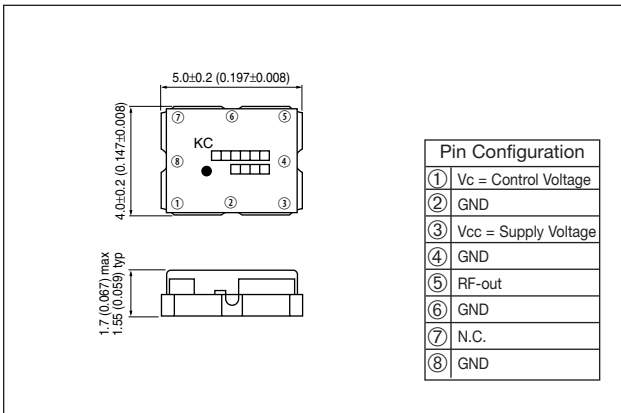


## YK511 Series



### DIMENSIONS

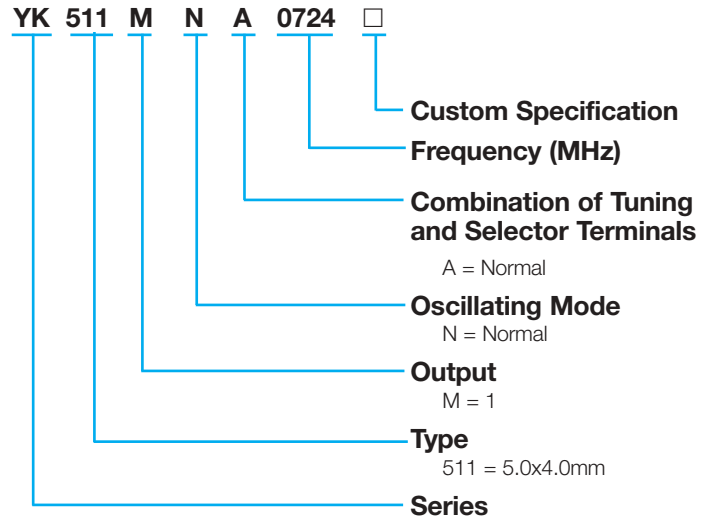
millimeters (inches)



### FEATURES

- Small and low profile
- Frequency 700MHz to 2GHz available
- Application for PDC CDMA

### HOW TO ORDER

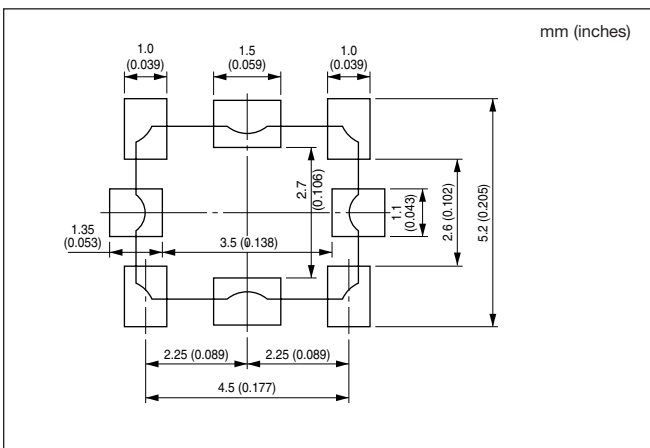


### SPECIFICATIONS

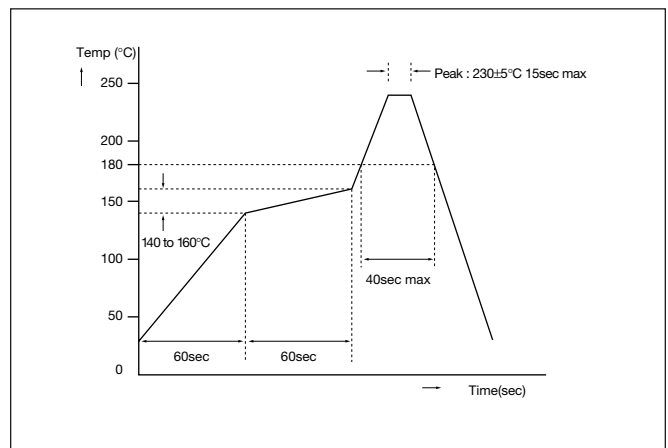
Part Number	System	Function	Frequency MHz	Vcc (V)	Icc (mA)	Po (dBm)	f <sub>TV</sub> (MHz/V)	C/N (dBC/Hz)
YK511MNA0724*	PDC800	RF	680 to 766.4	2.80±0.10	≤4.0	≥-8	61±9	≥104@25kHz
YK511MNA0741*	CDMA-ONE	RF	721.5 to 760.5	2.70±0.10	≤6.0	≥-4	34±4	≥107@25kHz ≥119@100kHz
YK511MNA0760*	W-CDMA	IF	760	2.70±0.10	≤5.0	-7±3	19.5±3	≥118@200kHz ≥142@5.0MHz
YK511MNA2330*	W-CDMA	RF	2270 to 2390	2.70±0.10	≤8.0	≥-5	82±12	≥109@200kHz ≥136@5.0MHz

Vcc: Power supply Icc: Current consumption Po: Output level f<sub>TV</sub>: Tuning voltage sensitivity Top: Operating temperature range

### RECOMMENDED LAND PATTERN



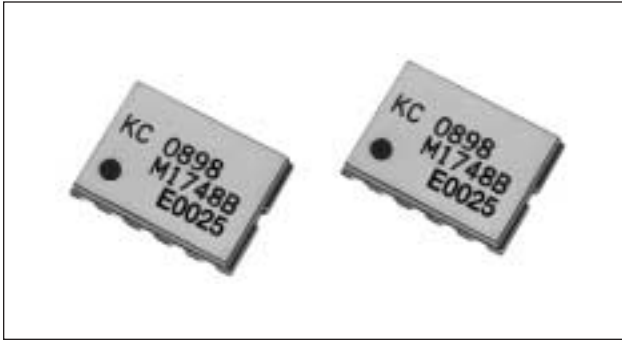
### RECOMMENDED REFLOW PROFILE



# Voltage Controlled Oscillators



## YK512 Series



### DIMENSIONS

millimeters (inches)

**YK512 DD**

P/N	DDC	DDF
①	Vcc2	GND
②	GND	GND
③	Vc	Vc
④	GND	Ps
⑤	Vcc1	Vcc
⑥	GND	GND
⑦	OUT1	OUT1
⑧	Vs1	Vs
⑨	GND	GND
⑩	Vs2	GND
⑪	OUT	OUT2
⑫	GND	GND

Vcc = Supply Voltage  
Vc = Control Voltage  
Vs = Band Select  
Ps = Power Save

### FEATURES

- Small and low profile (1.7mm max.)
- Dual high power signal output
- For Dualband Offset Solution

### HOW TO ORDER

YK 512 D D C 0898M1748 A

Custom Specification

Frequency (MHz)

Frequency Band 1  
Frequency Band 2

Combination of Control Voltage and Band Selector and Power Save Terminals

	Vc	Band Select	Power Save	Vc	Band Select	Power Save
A	1	0	-	E	2	2
B	1	1	-	F	1	1
C	1	2	-	G	1	1
D	2	1	-	H	1	2

Oscillating Mode

S = Shift W = Doubler  
N = Normal D = 2 Resonator

Output

M = 1 D = 2

Type

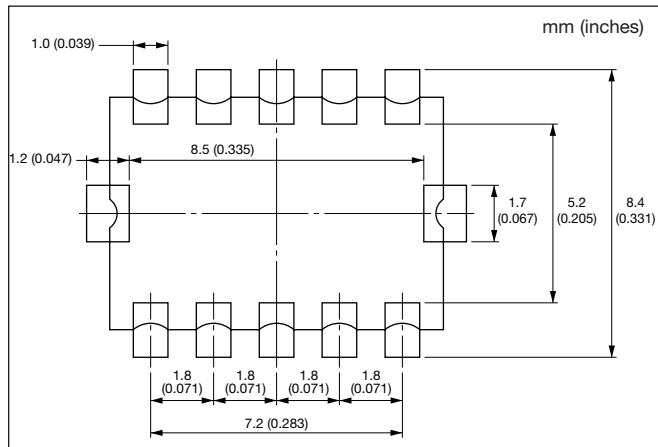
512 = 9.6x7.0mm

Series

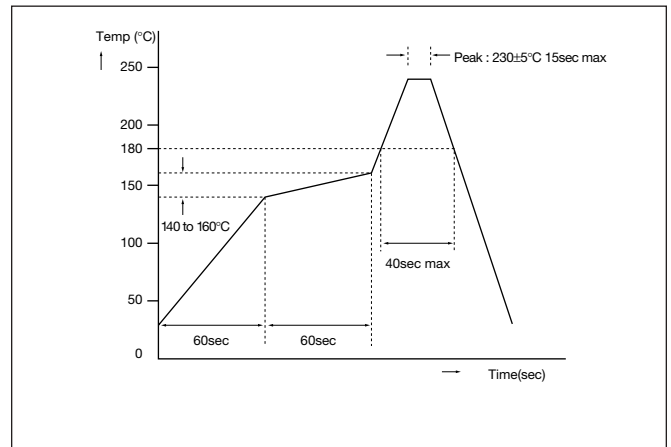
### SPECIFICATIONS

Part Number	System	Function	Frequency MHz	Vcc (V)	Icc (mA)	Po (dBm)	f <sub>TU</sub> (MHz/V)	C/N (dBC/Hz)
YK512DDC0898M1748*	GSM	Tx	880 to 915	2.75±0.10	≤27	9.5 typ	52±8	≥117@100kHz ≥164@ 20MHz
	DCS	Tx	1710 to 1785	2.75±0.10	≤35	9.5 typ	90±12	≥110@100kHz ≥156@ 20MHz
YK512DDF0898M1748*	GSM	Tx	880 to 915	2.80±0.10	≤30	9.0 typ	33±5	≥120@100kHz ≥162@ 20MHz
	DCS	Tx	1710 to 1785	2.80±0.10	≤30	9.0 typ	66±10	≥110@100kHz ≥154@ 20MHz

### RECOMMENDED LAND PATTERN



### RECOMMENDED REFLOW PROFILE

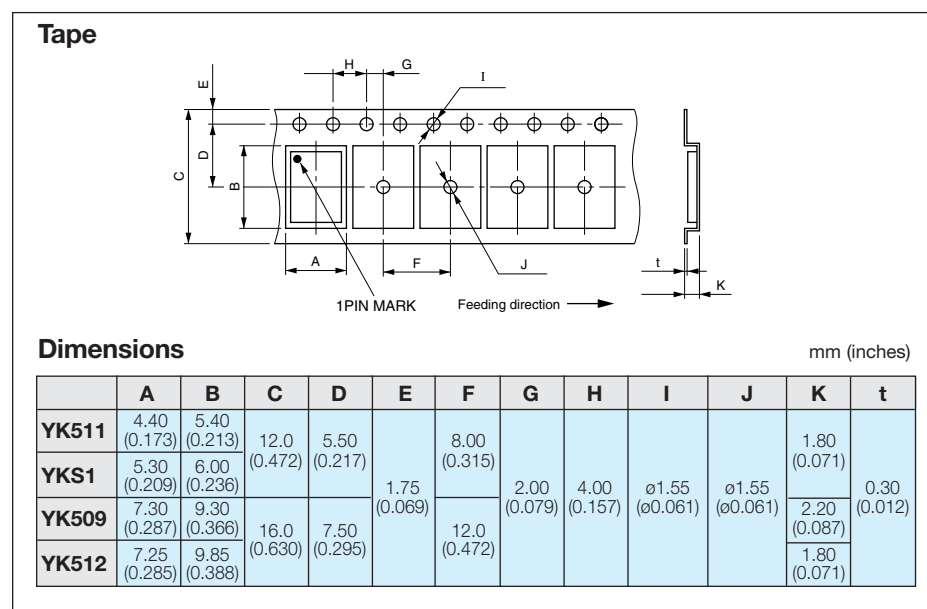
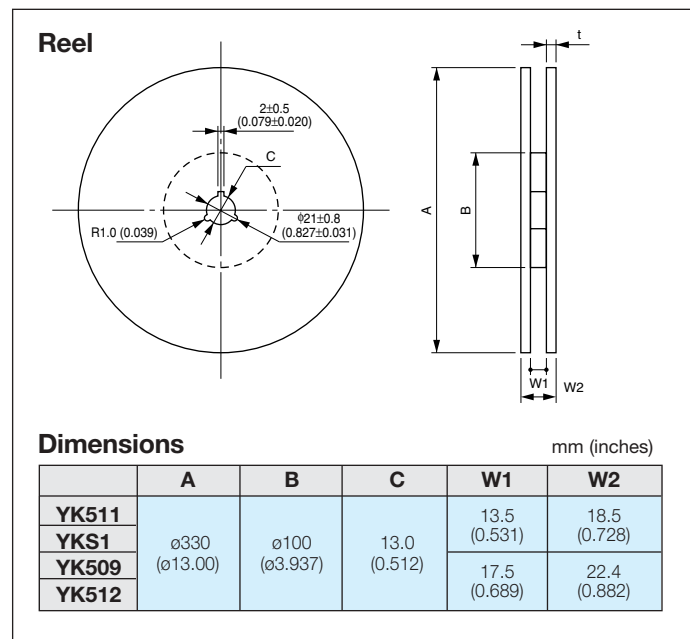


# Voltage Controlled Oscillators



## Packaging YK Series

### PACKAGING



### PACKAGING

Part Number	Packaging Quantity (pcs/reel)
<b>YK511</b>	3,000
<b>YKS1</b>	
<b>YK509</b>	2,000
<b>YK512</b>	