



## VCO Specifications

Unit Name	Voltage Controlled Oscillator
Part Name	KSV-3.3M1000AY
Date	January 27, 2003

Written by	Checked by	Approved by



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Customer:	<b>PRELIMINARY SPEC</b>	No. :
<b>K . S . E .</b>	<b>KSV-3.3M1000AY</b>	Date :

### 1. PART NUMBERING

**K S V — 3.3 M 1000 AY**  
 1                    2    3    4    5

- 1 Denote V. C. O
- 2 Operating voltage
- 3 V. C. O type
- 4 Center frequency
- 5 Revision

### 2. HOUSING DIMENSIONS

- 2 – 1 Circuit
- 2 – 2 Resonator
- 2 – 3 Terminal
- 2 – 4 Case
- 2 – 5 Dimensions

Hybrid Integrated Circuit  
 Micro Strip Line  
 SMD Type  
 Steel Sn-Pb Plating  
 See Fig -1

### 3. ELECTRICAL CHARACTERISTICS

<u>ITEM</u>	<u>SPEC</u>			<u>UNIT</u>	<u>TEST CONDITION</u>
	MIN.	TYP.	MAX.		
3 – 1 Operating Voltage ( Vcc )	3.15	3.3	3.45	Vdc	
3 – 2 Output Level	-5		1	dBm	Vcc = 3.3V
3 – 3 Current Consumption (Icc)			20	mA	Vcc = 3.3V
3 – 4 Tuning Sensitivity(avg.)	6			MHz/V	Vt = 0.3 ~ 3.0V
3 – 5 Tuning Voltage (Vt)	0.3		3.0	Vdc	
3 – 6 Oscillation Frequency			995	MHz	Vcc = 3.3V, Vt = 0.3V
	1005			MHz	Vcc = 3.3V, Vt = 3.0V
3 – 7 C/N ( @ 10 KHz offset )			-99	dBc / Hz	
C/N ( @100 KHz offset )			-120	dBc / Hz	Vcc = 3.3V, Vt = 1.7V
C/N ( @ 500 KHz offset )			-127	dBc / Hz	
C/N ( @ 1 MHz offset )			-132	dBc / Hz	
3 – 8 Pushing Figure			±500	kHz	Vcc = 3.3V±0.15V
3 – 9 2'nd Harmonic			-15	dBc	
3 – 10 Load Impedance		50		Ohm	
3 – 11 Operating Temperature	-40		+85	°C	
3 – 12 Pulling Figure			2	MHz	12dB Return Loss

**SPECIFICATIONS**

No. :

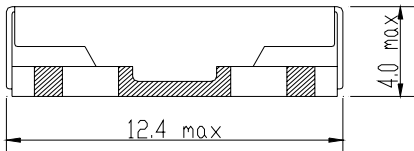
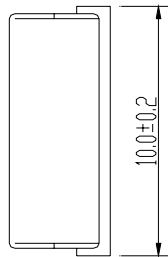
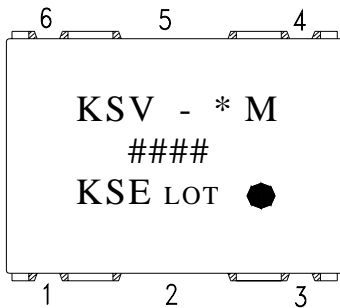
**K . S . E .**

**M-TYPE**

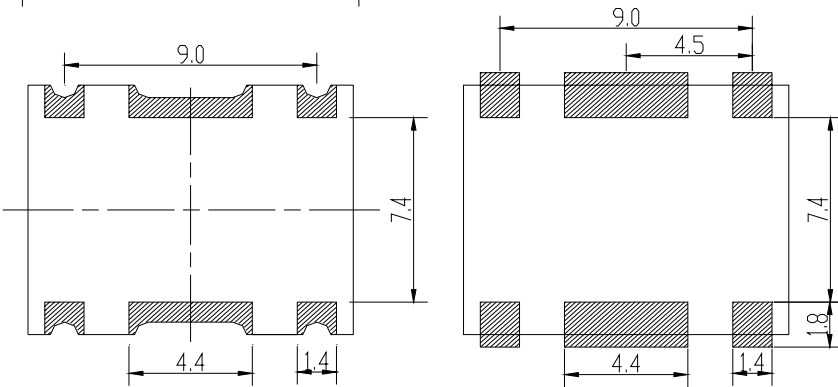
Date :

**FIG. 1 DIMENSIONS**

NO	FUNCTIONS
1	Tuning Voltage
2	GND
3	Supply Voltage
4	RF OUT
5,6	GND



UNIT : mm  
Tolerance :  $\pm 0.2$



**MARKING**

KSV Korea Sangshin VCO  
\* Supply Voltage  
M Type

#### Center Frequency  
KSE Manufacturer  
LOT YYWW date