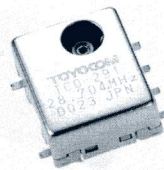
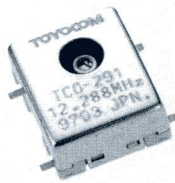
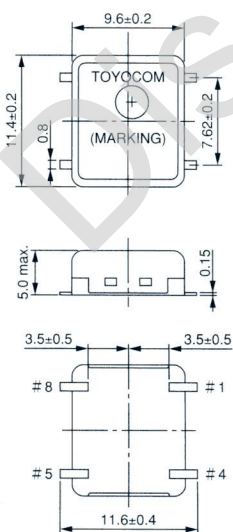
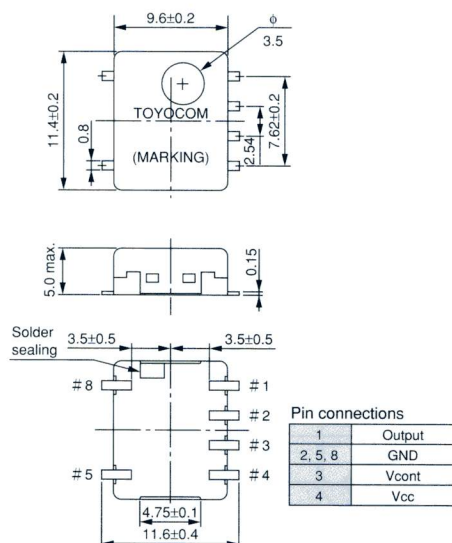
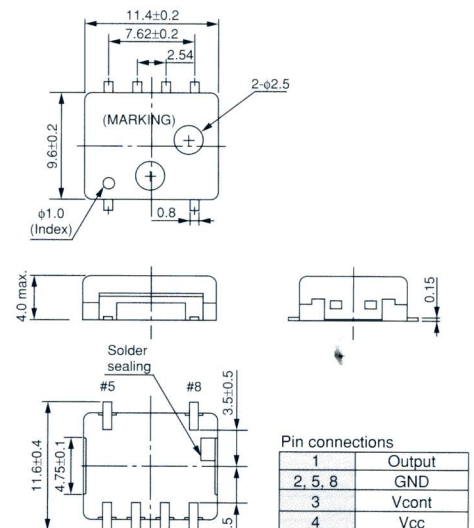


Product Data (VCXO)**TCO-291 Series****Features**

- Wide frequency control range
- TTL compatible/Clipped sinewave output
- Small package size (11.4×9.6×5.0hmm : 0.55cc)
- High frequency/Small package size (TCO-291J)

**Specifications**

Type	TCO-291A	TCO-291B	TCO-291J
Standard frequency	12.0~26.0 MHz	12.0~51.84 MHz	52.0~155.52 MHz
Supply voltage	+5.0 V±5 %		
Supply current	5 mA Max	30 mA Max	20 mA Max
Output level	1 Vp-p Min (Clipped Sinewave, DC-Cut) 10 kΩ // 10pF	TTL compatible (Fanout-2)	0 dBm Min / 50 Ω
Frequency stability	vs Temperature	±30 ppm Max / -20~+70 °C (referred to +25°C)	
	vs Supply voltage	±5.0 ppm Max / +5.0 V±5%	
	Aging	±3.0 ppm / year	±5.0 ppm / year
Frequency Control range	±100 ppm Min		
Frequency Control voltage	+2.5 V±2.5 V		+2.5 V±2.0 V
Pins	4	6	

Outline Drawing [mm]**[TCO-291A]****[TCO-291B]****[TCO-291J]**

Product Data (VCXO)**TCO-291 Series****Features**

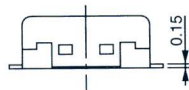
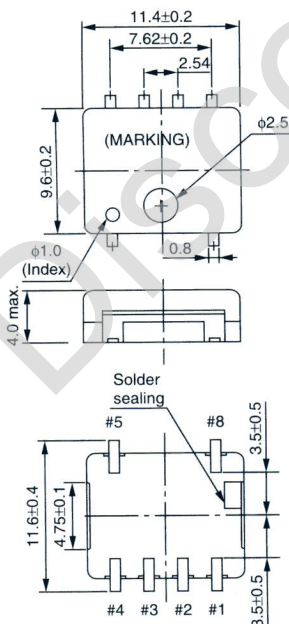
- Small package size (11.4×9.6 × 4.0hmm : 0.55cc)
- Wide frequency control range

Specifications

TYPE		TCO-291X	TCO-291Y	TCO-291Z
Standard frequency		155.52 MHz		
Supply voltage		+3.3V±5 %	+5.0V±5 %	-5.2V±5 %
Supply current		65 mA Max.		
Output level		LVPECL	PECL	ECL
Frequency stability	vs Temperature	±30 ppm Max./-40℃ to +85℃ (referred to +25℃)		
	vs Supply voltage	±5.0 ppm Max./+3.3 V±5 %	±5.0 ppm Max./+5.0 V±5 %	±5.0 ppm Max./-5.2 V±5 %
	Aging	±5.0 ppm Max./year		
Frequency control range		±100 ppm Min.		
Frequency control voltage		+1.65V±1.65V	+2.0V±2.0V	
Availably frequency range		60 ~ 185MHz		
Pins		6		

Outline Drawing [mm]

[TCO-291X, Y, Z]



Pin connections

1	Output
2, 5, 8	GND
3	Vcont
4	Vcc