

## Crystal Clock Oscillator

**Part Number:** TCO-711JTC  
**Applications:** Computers & Peripherals  
Consumer Application  
Instrumentation  
LAN-WAN  
Telecom (wired)

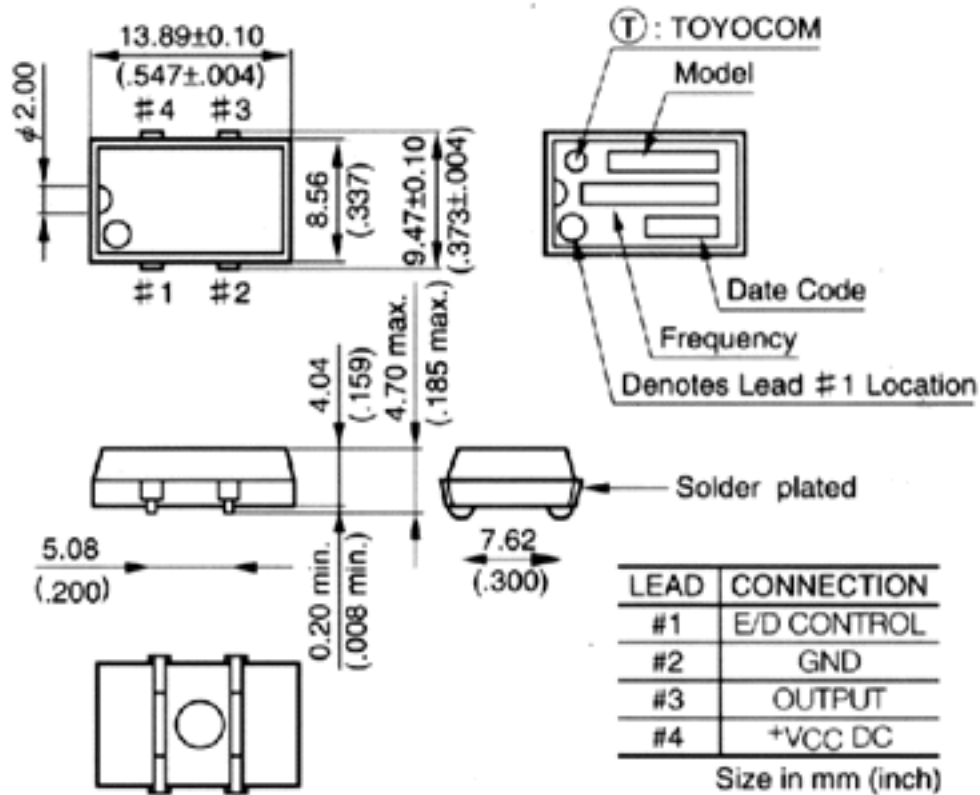
**Package:** SMO-J  
**Package Dimensions:** 13.89x8.56x4.7mm



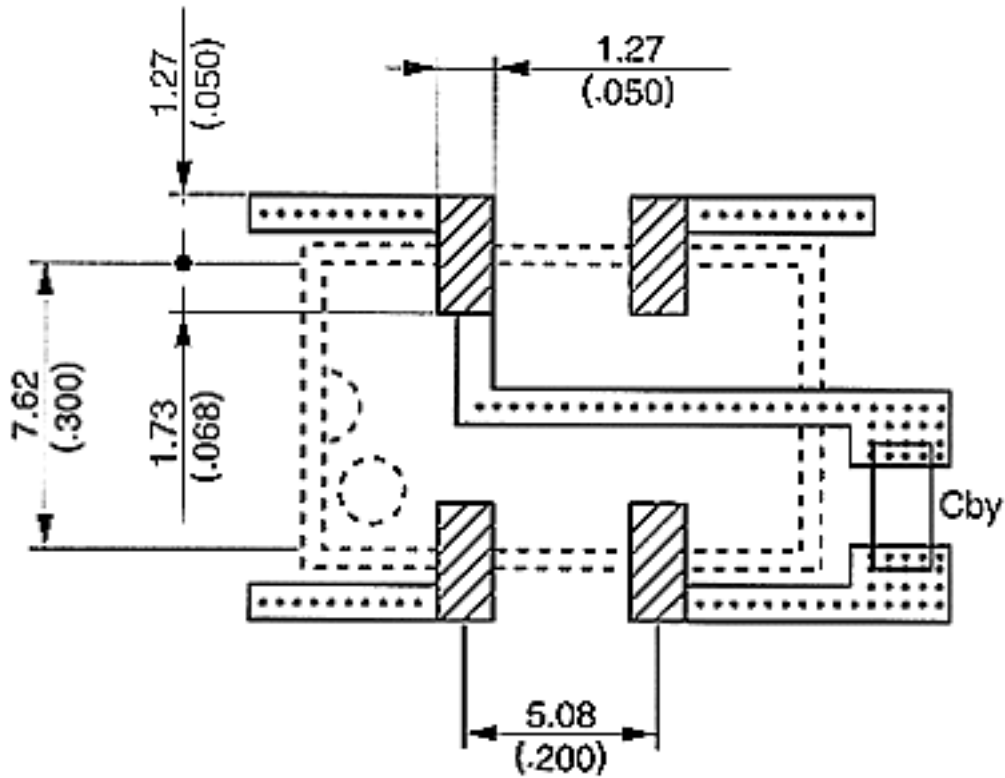
### Product Specifications

<b>Frequency Range:</b>	1.5~70 MHz	<b>Frequency Stability:</b>	±100ppm
<b>Operating Temperature:</b>	0~+70°C	<b>Supply Voltage:</b>	5.0V ±0.5V
<b>Current Drain:</b>	[I <sub>cc</sub> Max] See NOTE below	<b>Output Voltage:</b>	V <sub>oh</sub> =0.4V / V <sub>ol</sub> =0.4V
<b>Symetry:</b>	45:55 (at 50%V <sub>cc</sub> )	<b>Rise/Fall Time:</b>	12ns Max (1.5~26MHz), 10ns Max (26+~50MHz), 6ns Max (50+~70Mhz)
<b>Load Capacitance:</b>	50pF Max (1.5~26MHz), 30pF Max (26+~50MHz), 15pF Max (50+~70MHz)	<b>Start-Up Time:</b>	4ms Max (1.5~26MHz), 10ms Max (26+~70MHz)
<b>NOTE:</b>	I <sub>cc</sub> Max] 10mA (1.5~10MHz), 15mA (10+~26MHz), 35mA (26+~50MHz), 50mA (50+~70MHz)		

### TCO-71 IJTC | Outline Drawing

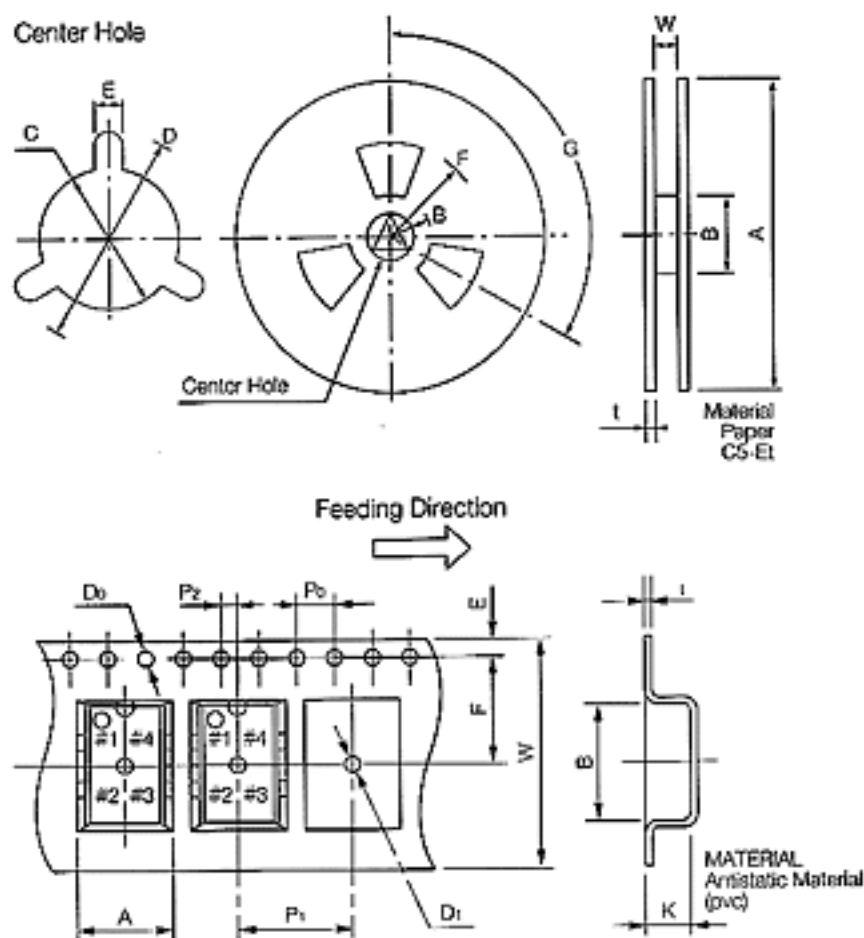


### TCO-71 IJTC | Foot Pattern



For more information on this or any other product, please call 847.593.8780 or your nearest TOYOCOM representative.

### TCO-711JTC | Tape and Reel



Tape dimensions

Package	Unit	A	B	D <sub>3</sub>	D <sub>4</sub>	E	F
SMO-J	(mm)	9.85	14.3	φ 1.5	φ 2.0	1.75	11.5
	(inch)	.388	.563	φ .059	φ .079	.069	.453
SMO-N	(mm)	5.75	7.65	φ 1.5	φ 2.0	1.75	7.5
	(inch)	.226	.301	φ .059	φ .079	.069	.295

Tape dimensions

Package	Unit	K	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	t	W
SMO-J	(mm)	4.7	4.0	12.0	2.0	0.3	24.0
	(inch)	.185	.158	.472	.079	.012	.945
SMO-N	(mm)	2.1	4.0	8.0	2.0	0.3	16.0
	(inch)	.083	.157	.315	.079	.012	.630

Reel dimensions

Package	Unit	A	B	C	D	E	F
SMO-J	(mm)	φ 330	φ 80	φ 13	φ 21	3.0	φ 190
	(inch)	φ 13.0	φ 3.15	φ .512	φ .827	.118	φ 7.48
SMO-N	(mm)	φ 255	φ 80	φ 13	φ 25	2.0	φ 215

SMD-N	(inch)	φ 10.0	φ 3.15	φ .512	φ .984	.079	φ 8.46
-------	--------	--------	--------	--------	--------	------	--------

**Reel dimensions**

Package	Unit	G	t	W
SMD-J	(mm)	120*	2.0	25.4
	(inch)	120*	.079	1.00
SMD-N	(mm)	120*	2.0	17.5
	(inch)	120*	.079	.689

[ All sizes in mm ]

For more information on this or any other product, please call 847.593.8780 or your nearest TOYOCOM representative.