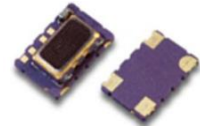


**Features**

- Low Current Consumption
- Wide Frequency Range
- Low Jitter
- SMD Package (7x5mm)

**Applications**

- Gigabit Ethernet / SDH/SONET
- Network Router/Switch
- Fibre Channel
- SAS, PCI Express Server
- Optical Transmission Equipment


**BT0507G Specifications**

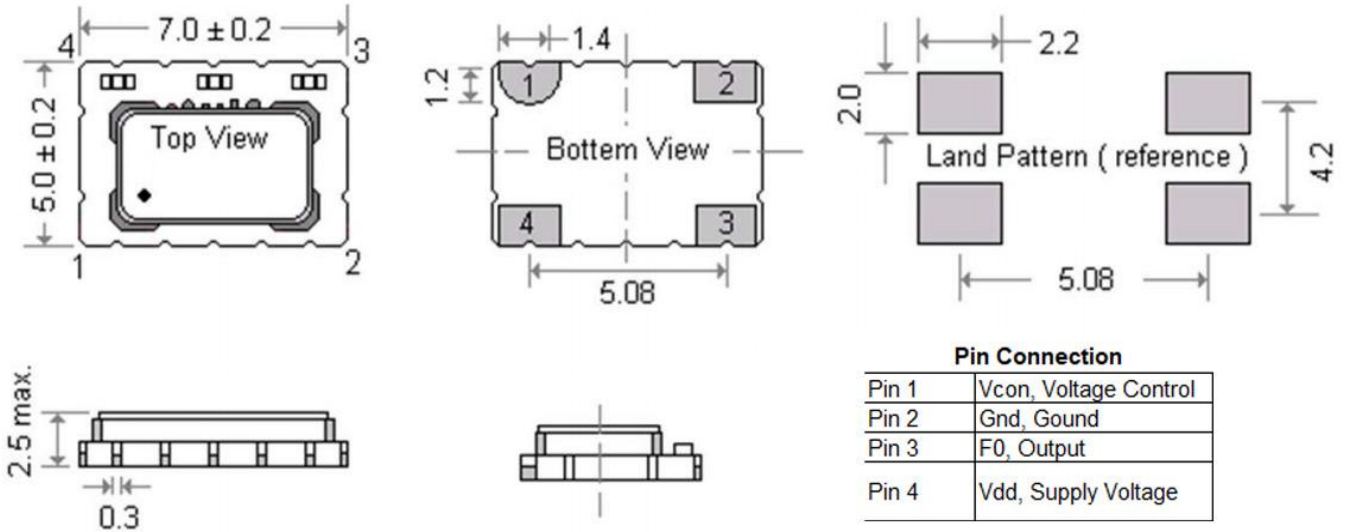
Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	2.5/3.0/3.3/5			V	CMOS	
	3.3/5			V	Clipped Sine Wave	
Supply Current	1.5	-	27	mA		
Frequency Range	1.25~ 156			MHz	CMOS	
	10~ 50			MHz	Clipped Sine Wave	
Nominal Frequency	10, 14.7456, 16.384, 19.2, 20, 24.576, 25, 26, 30.72, 40, 50, 77.76,			MHz		
Initial Frequency Tolerance	-	-	±1.0	ppm	At shipment, nominal EFC, +25°C	
Freq. Stability Vs. Temp.	±0.5	-	±3	ppm	0°C~+50°C	
	±1.0	-	±3	ppm	-10°C~+60°C	
	±1.0	-	±3	ppm	-30°C~+75°C	
	±1.5	-	±3	ppm	-40°C~+85°C	
Clipped Sine Wave	Output Level	0.8	-	Vp-p		
	Load	10kΩ//10pF				
CMOS	V <sub>OH</sub>	0.9VDD	-	V	CMOS Output, Load=15pf	
	V <sub>OL</sub>	-	-	0.1VDD	CMOS Output, Load=15pf	
	Duty Cycle	40	-	60	(V <sub>OH</sub> - V <sub>OL</sub> )/2	
	Rise/Fall Edge	-	-	10	ns	CMOS Output, Load=15pf
	Load	-	-	10	pf	
Supply Sensitivity	-	-	±0.3	ppm	Vcc±5%	
Load Sensitivity	-	-	±0.3		Load±10%	
Aging/ First Year	-	-	±1.0		Standard	
	-	-	±1.0		Customized	
SSB Phase Noise @10MHz	-	-	-80	dBc/Hz	Offset 10Hz	
	-	-	-115		Offset 100Hz	
	-	-	-135		Offset 1kHz	
	-	-	-148		Offset 10kHz	
	-	-	-148		Offset 100kHz	
Control Voltage Range	1.5 ± 1.0V				2.5/3.0/3.3/5V	
Frequency Turning Range	±5	-	-	ppm		
Tuning Slope	Positive					
Non-linearity	-	-	10	%		
Input Impedance	50	-	-	MΩ	CMOS	
	1	-	-	MΩ	Clipped Sine Wave	

**Environmental Conditions**

Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range	-55°C ~ +125°C

**Outline Dimension & Pin Connections**

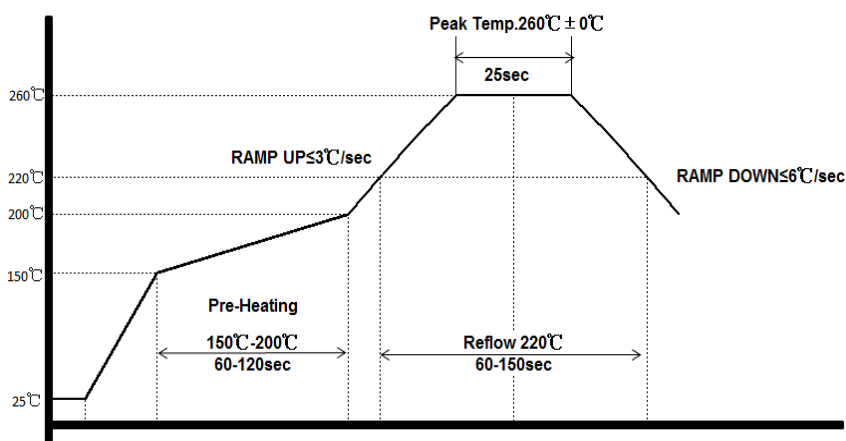
Outline Dimensions: mm


**Maximum Ratings**

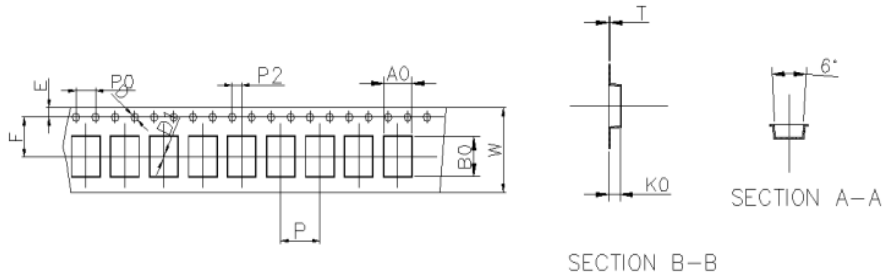
Parameter	Symbol	Rating
Supply Voltage	Vdd	-0.5V / 6V
Control Voltage	Vcon	0V / 3V
ESD, HBM/CDM/MM		4KV/ 2KV/ 200V

**Reliability**

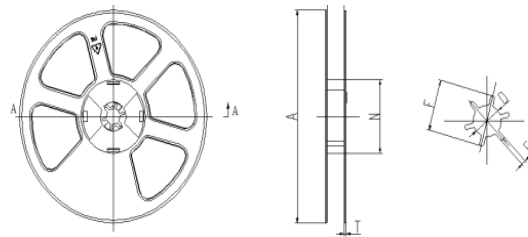
Parameter	Condition
Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solderability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC

**IR Reflow Profile**


Tape & Reel



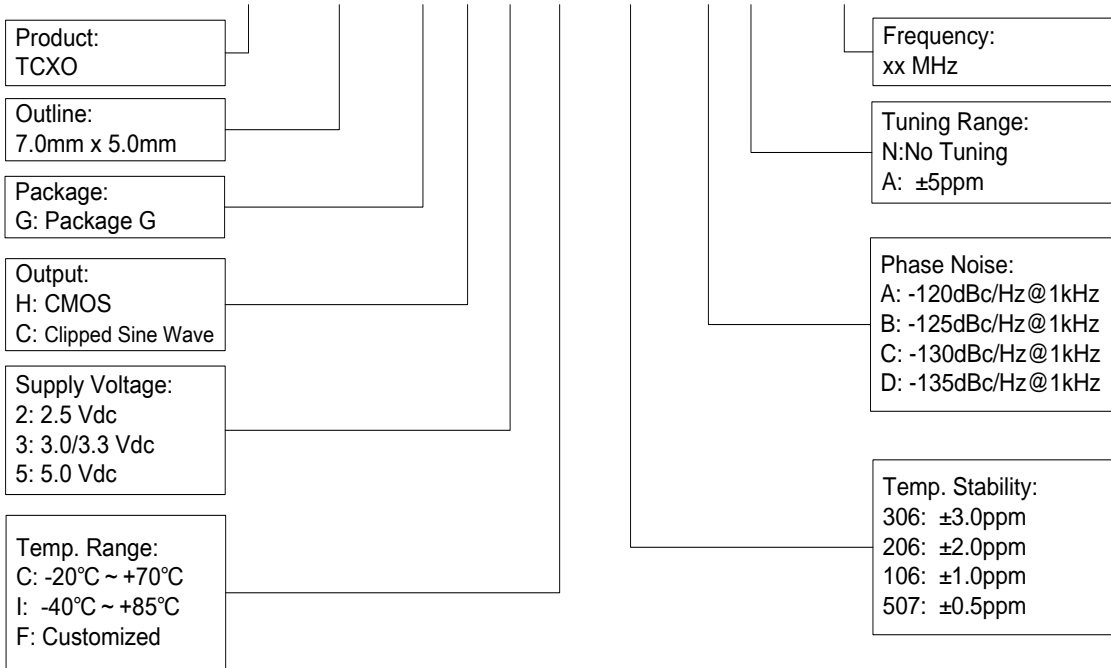
ITEM	W	A0	B0	K0	P	F	E	D	P0	P2	t	7'	
DIM	16.0	5.7	7.6	2.4	8	7.5	1.75	1.50	4.00	2.00	0.30	L/R	QTY/PCS
TOLE	+0.30 -0.30	+0.15 -0.15	+0.15 -0.15	+0.15 -0.15	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.00	+0.10 -0.10	+0.10 -0.10	+0.05 -0.05	5M/R	500 PCS



Item	W	A	N	T	E	F	D
Size	16.4	178	62	1.8	2	21.8	13.5
TOL	±0.3	±0.5	±0.4	±0.2	±0.5	±0.8	±0.3

Ordering Guide

**BT 0507 G X X X XXX X X XX.XX**



Example: BT0507GH3C287DN16.384

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