

- Pletronics' THA3002-20.0MHz is a temperature compensated crystal oscillator
- Optional Voltage Control Function
- HCMOS output.
- The package is designed for high density surface mount designs.
- Tape and Reel packaging is available.
- Select Stratum-III frequencies available
- 5 x 7 mm LCC Ceramic Package

Pletronics Inc. certifies this device is in accordance with the RoHS 6/6 (2002/95/EC) and WEEE (2002/96/EC) directives.

Pletronics Inc. guarantees the device does not contain the following:

Cadmium, Hexavalent Chromium, Lead, Mercury, PBB's, PBDE's

Weight of the Device: 0.10 grams

Moisture Sensitivity Level: 1 As defined in J-STD-020D.1

Second Level Interconnect code: e4

Absolute Maximum Ratings:

Parameter	Unit
V _{CC} Supply Voltage	-0.5V to +6.5V
V _i Input Voltage	-0.5V to V _{CC} + 0.5V
V _o Output Voltage	-0.5V to V _{CC} + 0.5V

Thermal Characteristics

The maximum die or junction temperature is 155°C

The thermal resistance junction to board is 30 to 50°C/Watt depending on the solder pads, ground plane and construction of the PCB.

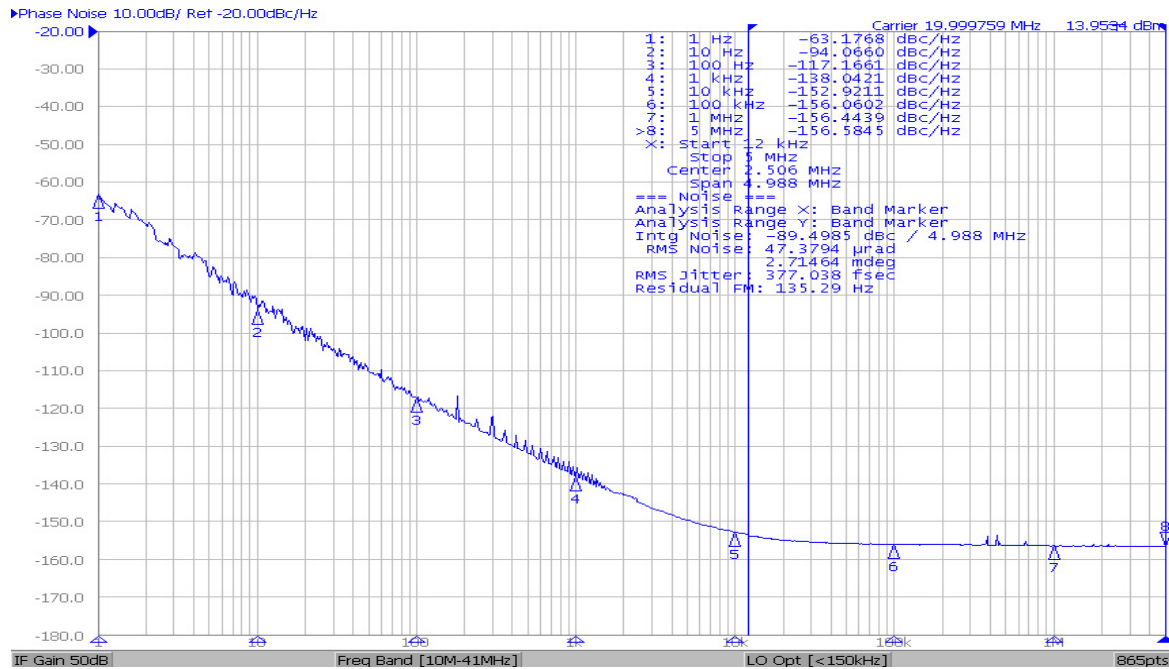
ESD Rating

Model	Minimum Voltage	Conditions
Human Body Model	1500	MIL-STD-883 Method 3115
Charged Device Model	1000	JESD 22-C101

Electrical Specification for specified Vcc over the specified temperature range

Item	Min	TYP	Max	Unit	Condition
Frequency Range		20.0		MHz	
Frequency Stability ¹	-0.28		+0.28	ppm	Vcontrol @ 1.50 volts (Fmax-Fmin)/2
Holdover	-0.37		+0.37	ppm	GR-1244-CORE
Frequency Calibration	-0.5		+0.5	ppm	Frequency offset at 25°C, 60 minutes after reflow
Frequency Stability / Supply	-0.1		+0.1	ppm	Load: 10K ohm // 10 pF & Vcc ± 5%
Load Sensitivity	-0.2		+0.2	ppm	±2% variation in magnitude from 10K ohm ±10% 10 pF
Long Term Stability (Aging)	-3.4		+3.4	ppb	After 15 years.
Output Waveform	CMOS				
Output V _{HIGH} as % of Supply	90			%V _S	Load: 10K ohm ± 10% // 10 pF ± 10%
Output V _{LOW} as % of Supply			10	%V _S	
T _{RISE} and T _{FALL} (10% to 90%)			6.5	nS	
Duty Cycle at 50% Supply	40	50	60	%	
Phase Noise	10 Hz	-	-90	-	Typical values for a 20.0 MHz oscillator at 25°C
	100 Hz	-	-115	-	
	1 kHz	-	-135	-	
	10 kHz	-	-145	-	
Jitter	-	-	1.7	pS	10 Hz to 1 MHz offset from carrier
V Supply Range V _{CC}	3.15	3.3	3.45	Volts	
Supply Current I _{CC}	-	-	7.0	mA	
Vcontrol Range	0.5		2.50	Volts	1.50 volts nominal
Frequency Pullability	± 9.2	± 10.0	-	ppm	
Linearity	-	0.05	2.0	%	In accordance with MIL-PRF-55310
Operating Temperature Range	-40		+85	°C	
Storage Temperature Range	-55		+95	°C	

Phase Noise:



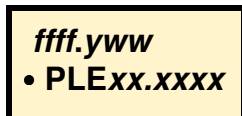
MTIE:



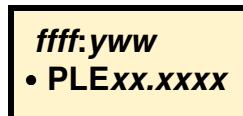
Reliability: Environmental Compliance

Parameter	Condition
Mechanical Shock	MIL-STD-883 Method 2002, Condition B
Vibration	MIL-STD-883 Method 2007, Condition A
Solderability	MIL-STD-883 Method 2003
Thermal Shock	MIL-STD-883 Method 1011, Condition A

Part Marking:



or

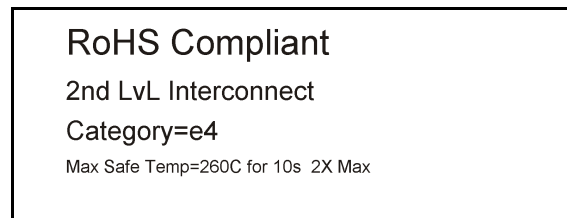
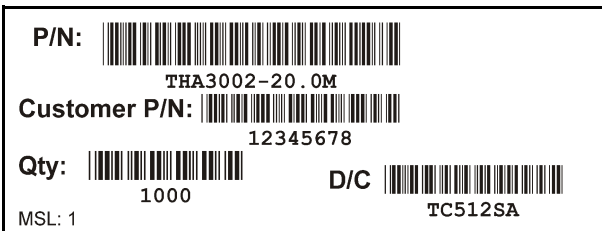


ffff.yww = frequency in MHz . Year week
 PLE = Pletronics
 xx.xxxx = internal code

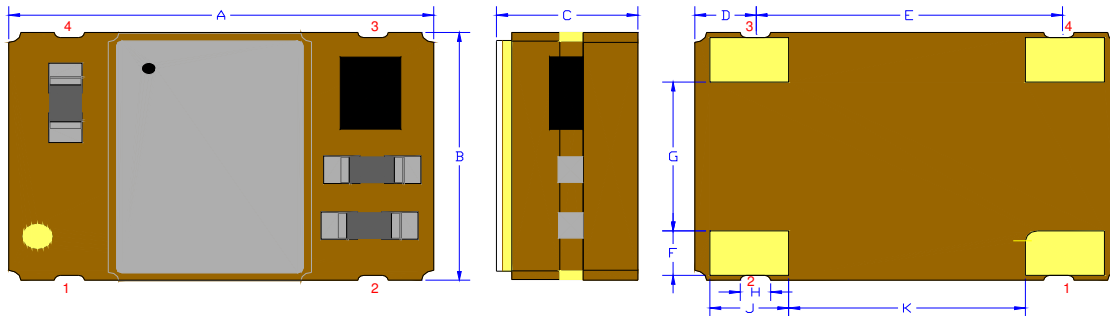
Package Labeling

Label is 1" x 2.6" (25.4mm x 66.7mm)
 Font is Courier New
 Bar code is 39-Full ASCII

Label is 1" x 2.6" (25.4mm x 66.7mm)
 Font is Arial



Mechanical:



Not to Scale

Pad	Function	Note
1	Vcontrol Input	If this function is not specified, recommend connecting this pad to ground.
2	Ground (GND)	
3	Output	
4	Supply Voltage (V_{CC})	Recommend connecting appropriate power supply bypass capacitors as close as possible.

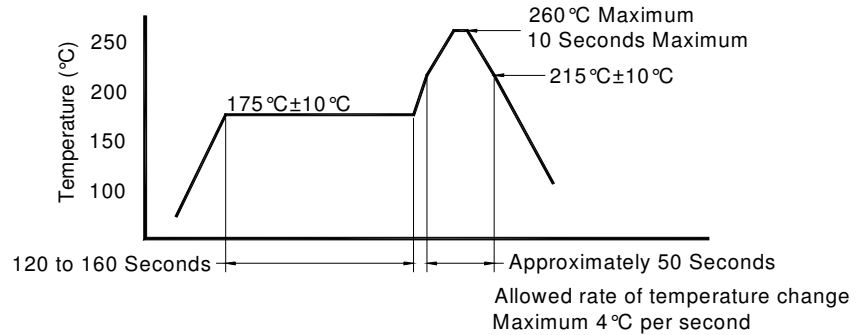
	Inches	mm
A	0.276 \pm 0.006	7.00 \pm 0.15
B	0.197 \pm 0.006	5.00 \pm 0.15
C	0.099 max	2.50 max
D ¹	0.039	1.00
E ¹	0.197	5.00
F ¹	0.025	0.90
G ¹	0.118	3.00
H ¹	0.020	0.50
J ¹	0.051	1.30
K ¹	0.154	3.90

¹ Typic dimensions

Contacts :

Gold 11.8 μ inches 0.3 μ m minimum over Nickel 50 to 350 μ inches 1.27 to 8.89 μ m

Reflow Cycle (typical for lead free processing)

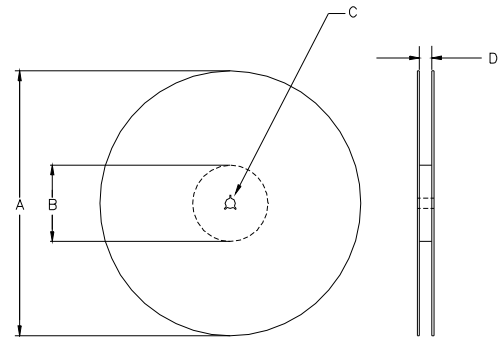


The part may be reflowed 2 times without degradation.

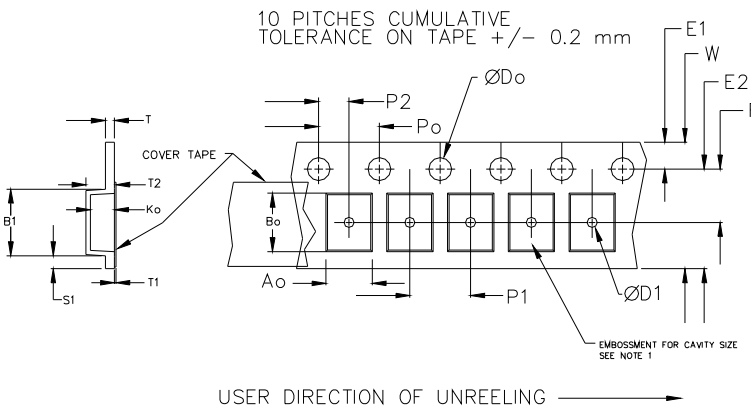
Tape and Reel: available for quantities of 250 to 1000 per reel, cut tape for < 250

Constant Dimensions Table 1								
Tape Size	D0	D1 Min	E1	P0	P2	S1 Min	T Max	T1 Max
8mm	1.5	1.0	1.75	4.0	2.0 ± 0.05	0.6	0.6	0.1
12mm		1.5			2.0 ± 0.1			
16mm	+0.1 -0.0	1.5	± 0.1	± 0.1	2.0 ± 0.1			
24mm		1.5						

Variable Dimensions Table 2							
Tape Size	B1 Max	E2 Min	F	P1	T2 Max	W Max	Ao, Bo & Ko
16 mm	12.1	14.25	7.5 ± 0.1	8.0 ± 0.1	8.0	16.3	Note 1



Note 1: Embossed cavity to conform to EIA-481-B Dimensions in mm Not to scale



REEL DIMENSIONS					
A	inches	7.0	10.0	13.0	Tape Width
	mm	177.8	254.0	330.2	
B	inches	2.50	4.00	3.75	Tape Width
	mm	63.5	101.6	95.3	
C	mm	13.0 +0.5 / -0.2			Tape Width
D	mm	16.4	16.4	16.4	16.0
		+2.0	+2.0	+2.0	
		-0.0	-0.0	-0.0	

Reel dimensions may vary from the above

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PLE warrants performance of this product to the specifications applicable at the time of sale in accordance with PLE's limited warranty. Testing and other quality control techniques are used to the extent PLE deems necessary to support this warranty. Except where mandated by specific contractual documents, testing of all parameters of each product is not necessarily performed.

PLE assumes no liability for application assistance or customer product design. Customers are responsible for their products and applications using PLE components. To minimize the risks associated with the customer products and applications, customers should provide adequate design and operating safeguards.

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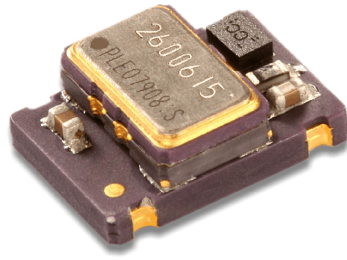
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Contacting Pletronics Inc.

Pletronics Inc.
19013 36th Ave. West
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Tel: 425-776-1880
Fax: 425-776-2760
E-mail: ple-sales@pletronics.com
URL: www.pletronics.com

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- Pletronics' THA3003-38.00MHz is a temperature compensated crystal oscillator
- Optional Voltage Control Function
- HCMOS output.
- The package is designed for high density surface mount designs.
- Tape and Reel packaging is available.
- Select Stratum-III frequencies available
- 5 x 7 mm LCC Ceramic Package

Pletronics Inc. certifies this device is in accordance with the RoHS 6/6 (2002/95/EC) and WEEE (2002/96/EC) directives.

Pletronics Inc. guarantees the device does not contain the following:

Cadmium, Hexavalent Chromium, Lead, Mercury, PBB's, PBDE's

Weight of the Device: 0.10 grams

Moisture Sensitivity Level: 1 As defined in J-STD-020D.1

Second Level Interconnect code: e4

Absolute Maximum Ratings:

Parameter	Unit
V _{CC} Supply Voltage	-0.5V to +6.5V
V _i Input Voltage	-0.5V to V _{CC} + 0.5V
V _o Output Voltage	-0.5V to V _{CC} + 0.5V

Thermal Characteristics

The maximum die or junction temperature is 155°C

The thermal resistance junction to board is 30 to 50°C/Watt depending on the solder pads, ground plane and construction of the PCB.

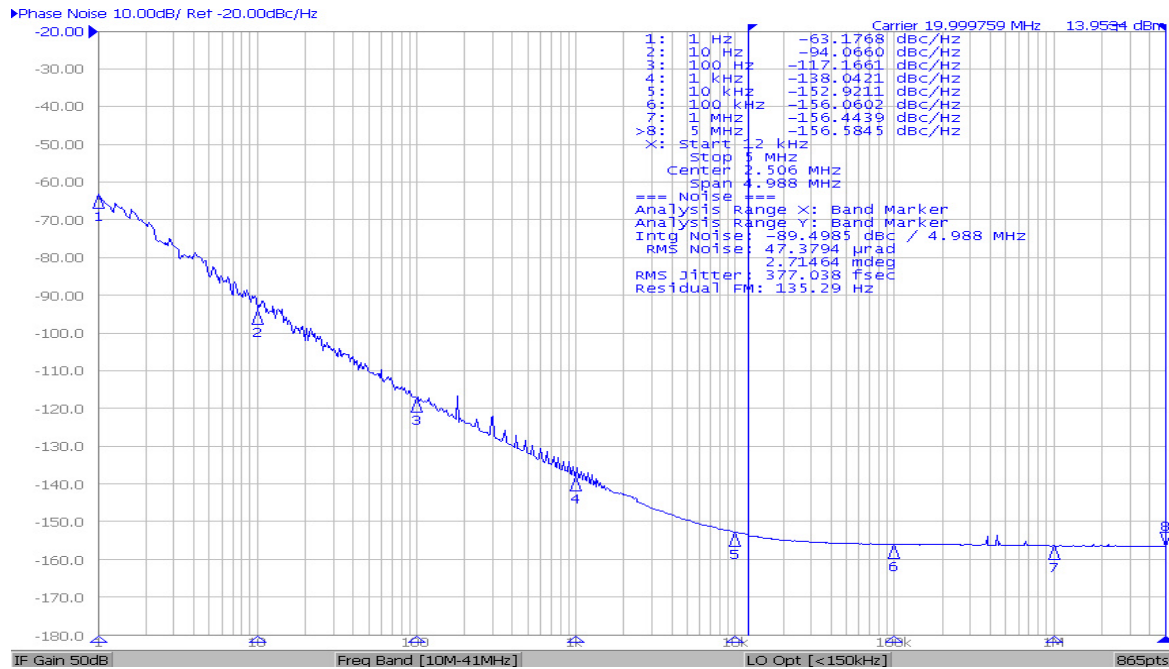
ESD Rating

Model	Minimum Voltage	Conditions
Human Body Model	1500	MIL-STD-883 Method 3115
Charged Device Model	1000	JESD 22-C101

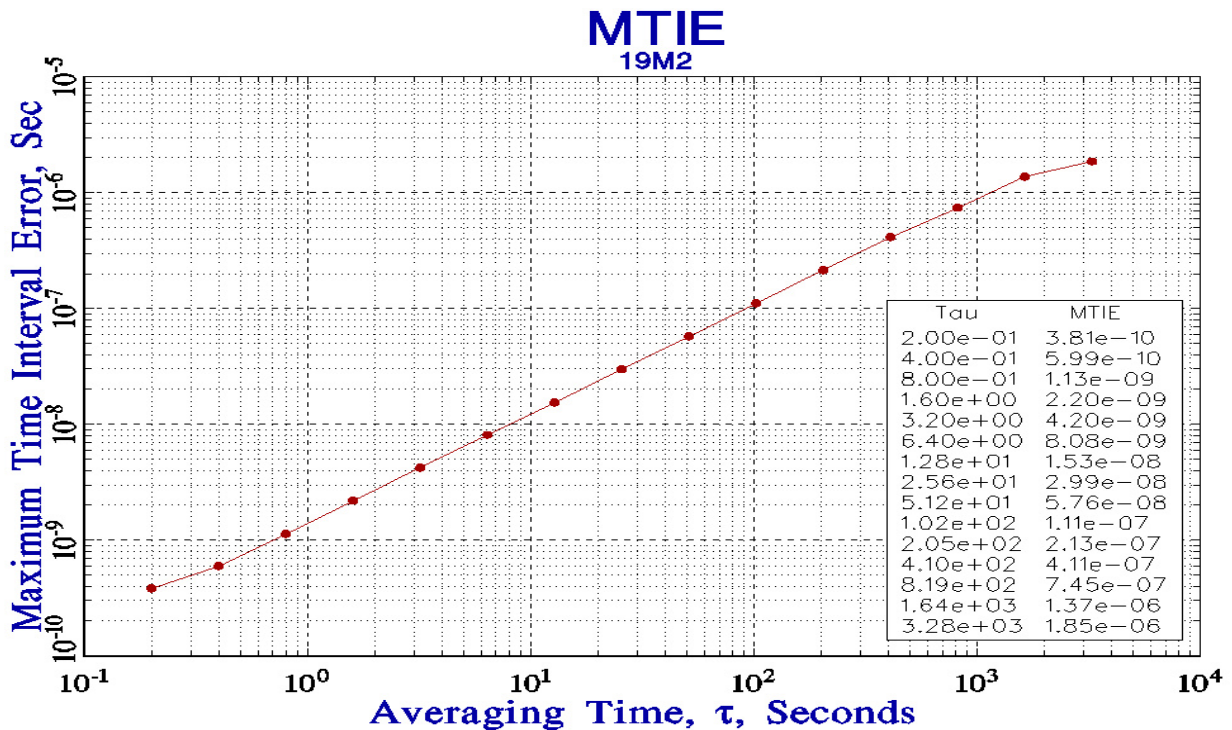
Electrical Specification for specified Vcc over the specified temperature range

Item	Min	TYP	Max	Unit	Condition
Frequency Range		38.88		MHz	
Frequency Stability ¹	-0.28		+0.28	ppm	Vcontrol @ 1.50 volts (Fmax-Fmin)/2
Holdover	-0.37		+0.37	ppm	GR-1244-CORE
Frequency Calibration	-0.5		+0.5	ppm	Frequency offset at 25°C, 60 minutes after reflow
Frequency Stability / Supply	-0.1		+0.1	ppm	Load: 10K ohm // 10 pF & Vcc ± 5%
Load Sensitivity	-0.2		+0.2	ppm	±2% variation in magnitude from 10K ohm ±10% 10 pF
Long Term Stability (Aging)	-3.4		+3.4	ppb	After 15 years.
Output Waveform	CMOS				
Output V _{HIGH} as % of Supply	90			%V _S	Load: 10K ohm ± 10% // 10 pF ± 10%
Output V _{LOW} as % of Supply			10	%V _S	
T _{RISE} and T _{FALL} (10% to 90%)			6.5	nS	
Duty Cycle at 50% Supply	40	50	60	%	
Phase Noise	10 Hz	-	-90	-	Typical values for a 20.0 MHz oscillator at 25°C
	100 Hz	-	-115	-	
	1 kHz	-	-135	-	
	10 kHz	-	-145	-	
Jitter	-	-	1.7	pS	10 Hz to 1 MHz offset from carrier
V Supply Range V _{CC}	3.15	3.3	3.45	Volts	
Supply Current I _{CC}	-	-	7.0	mA	
Vcontrol Range	0.5		2.50	Volts	1.50 volts nominal
Frequency Pullability	± 9.2	± 10.0	-	ppm	
Linearity	-	0.05	2.0	%	In accordance with MIL-PRF-55310
Operating Temperature Range	-40		+85	°C	
Storage Temperature Range	-55		+95	°C	

Phase Noise:



MTIE:



Reliability: Environmental Compliance

Parameter	Condition
Mechanical Shock	MIL-STD-883 Method 2002, Condition B
Vibration	MIL-STD-883 Method 2007, Condition A
Solderability	MIL-STD-883 Method 2003
Thermal Shock	MIL-STD-883 Method 1011, Condition A

Part Marking:

fff.yww
• PLExx.xxxx

or





fff.yww
• PLExx.xxxx

fff.yww = frequency in MHz . Year week
PLE = Pletronics
xx.xxxx = internal code

Package Labeling

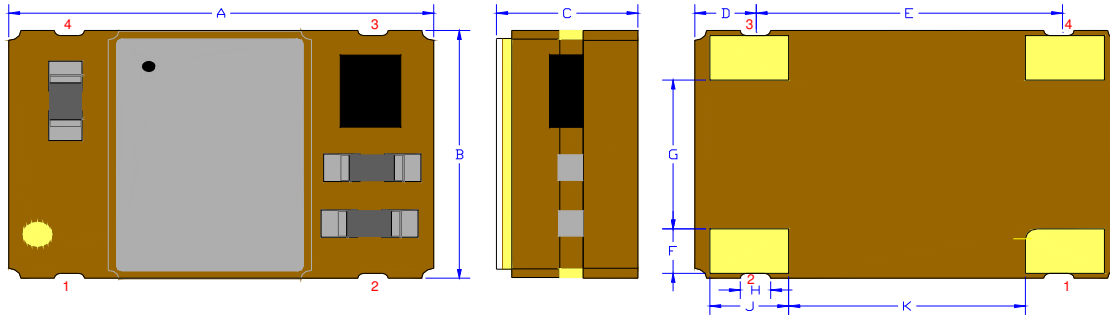
Label is 1" x 2.6" (25.4mm x 66.7mm)
Font is Courier New

Label is 1" x 2.6" (25.4mm x 66.7mm)
Font is Arial
Bar code is 39-Full ASCII

P/N:	
	THA3003-38.80M
Customer P/N:	
	12345678
Qty:	
	1000
D/C	
	TC512SA
MSL: 1	

RoHS Compliant
2nd LvL Interconnect
Category=e4
Max Safe Temp=260C for 10s 2X Max

Mechanical:



Not to Scale

Pad	Function	Note
1	Vcontrol Input	If this function is not specified, recommend connecting this pad to ground.
2	Ground (GND)	
3	Output	
4	Supply Voltage (V_{CC})	Recommend connecting appropriate power supply bypass capacitors as close as possible.

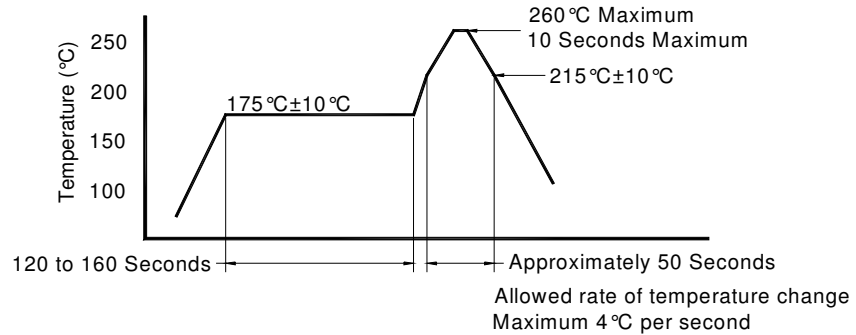
	Inches	mm
A	0.276 \pm 0.006	7.00 \pm 0.15
B	0.197 \pm 0.006	5.00 \pm 0.15
C	0.099 max	2.50 max
D ¹	0.039	1.00
E ¹	0.197	5.00
F ¹	0.025	0.90
G ¹	0.118	3.00
H ¹	0.020	0.50
J ¹	0.051	1.30
K ¹	0.154	3.90

¹ Typic dimensions

Contacts :

Gold 11.8 μ inches 0.3 μ m minimum over Nickel 50 to 350 μ inches 1.27 to 8.89 μ m

Reflow Cycle (typical for lead free processing)

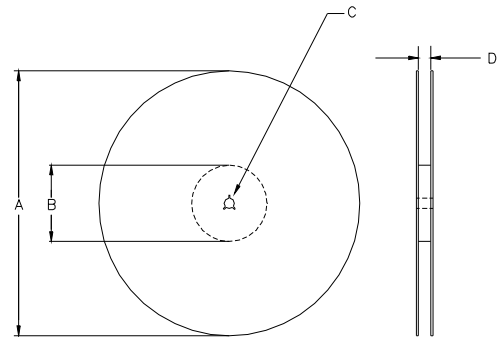


The part may be reflowed 2 times without degradation.

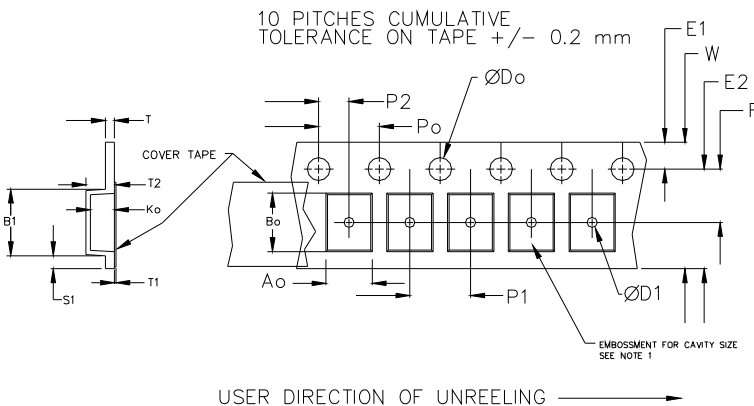
Tape and Reel: available for quantities of 250 to 1000 per reel, cut tape for < 250

Constant Dimensions Table 1								
Tape Size	D0	D1 Min	E1	P0	P2	S1 Min	T Max	T1 Max
8mm	1.5	1.0	1.75	4.0	2.0 ± 0.05	0.6	0.6	0.1
12mm		1.5			2.0 ± 0.1			
16mm		+0.1 / -0.0			± 0.1			
24mm		1.5			± 0.1			

Variable Dimensions Table 2							
Tape Size	B1 Max	E2 Min	F	P1	T2 Max	W Max	Ao, Bo & Ko
16 mm	12.1	14.25	7.5 ± 0.1	8.0 ± 0.1	8.0	16.3	Note 1



Note 1: Embossed cavity to conform to EIA-481-B Dimensions in mm Not to scale



REEL DIMENSIONS					
A	inches	7.0	10.0	13.0	Tape Width
	mm	177.8	254.0	330.2	
B	inches	2.50	4.00	3.75	Tape Width
	mm	63.5	101.6	95.3	
C	mm	13.0 +0.5 / -0.2			Tape Width
D	mm	16.4	16.4	16.4	16.0
		+2.0	+2.0	+2.0	
		-0.0	-0.0	-0.0	

Reel dimensions may vary from the above

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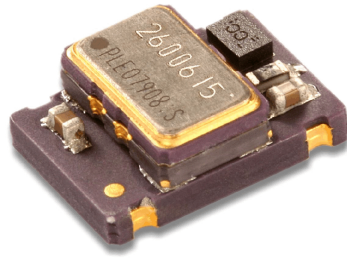
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Contacting Pletronics Inc.

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Fax: 425-776-2760
E-mail: ple-sales@pletronics.com
URL: www.pletronics.com

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- Pletronics' THA3004-16.384 is a temperature compensated crystal oscillator
- Optional Voltage Control Function
- HCMOS output.
- The package is designed for high density surface mount designs.
- Tape and Reel packaging is available.
- Select Stratum-III frequencies available
- 5 x 7 mm LCC Ceramic Package

Pletronics Inc. certifies this device is in accordance with the RoHS 6/6 (2002/95/EC) and WEEE (2002/96/EC) directives.

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Weight of the Device: 0.10 grams

Moisture Sensitivity Level: 1 As defined in J-STD-020D.1

Second Level Interconnect code: e4

Absolute Maximum Ratings:

Parameter	Unit
V _{CC} Supply Voltage	-0.5V to +6.5V
V _i Input Voltage	-0.5V to V _{CC} + 0.5V
V _o Output Voltage	-0.5V to V _{CC} + 0.5V

Thermal Characteristics

The maximum die or junction temperature is 155°C

The thermal resistance junction to board is 30 to 50°C/Watt depending on the solder pads, ground plane and construction of the PCB.

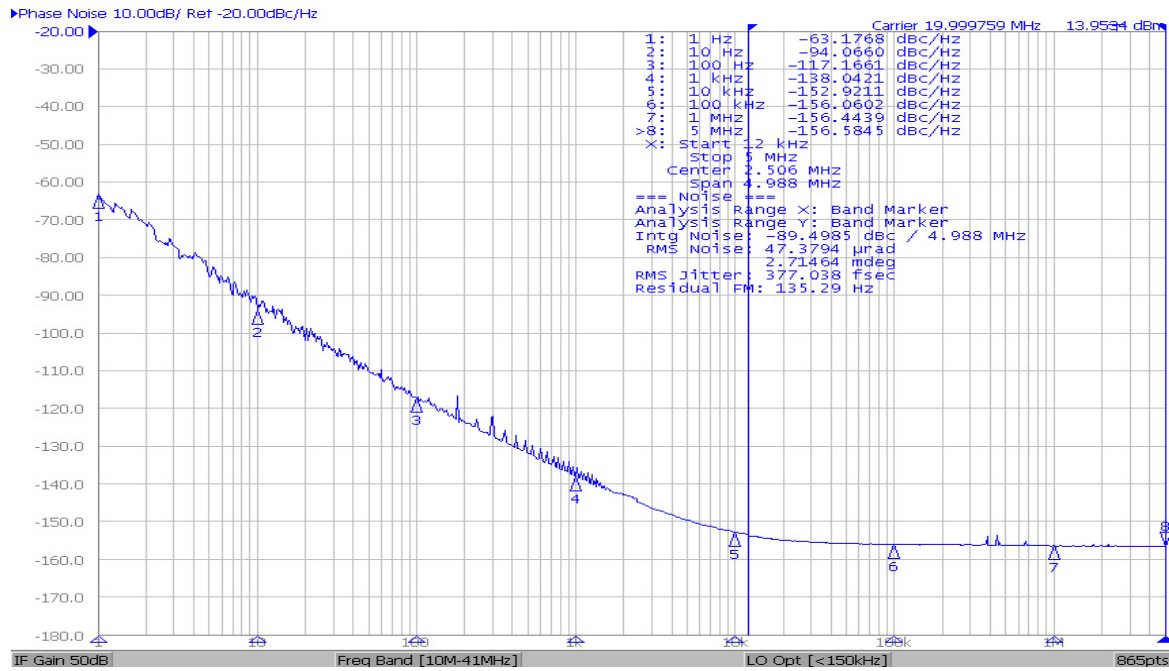
ESD Rating

Model	Minimum Voltage	Conditions
Human Body Model	1500	MIL-STD-883 Method 3115
Charged Device Model	1000	JESD 22-C101

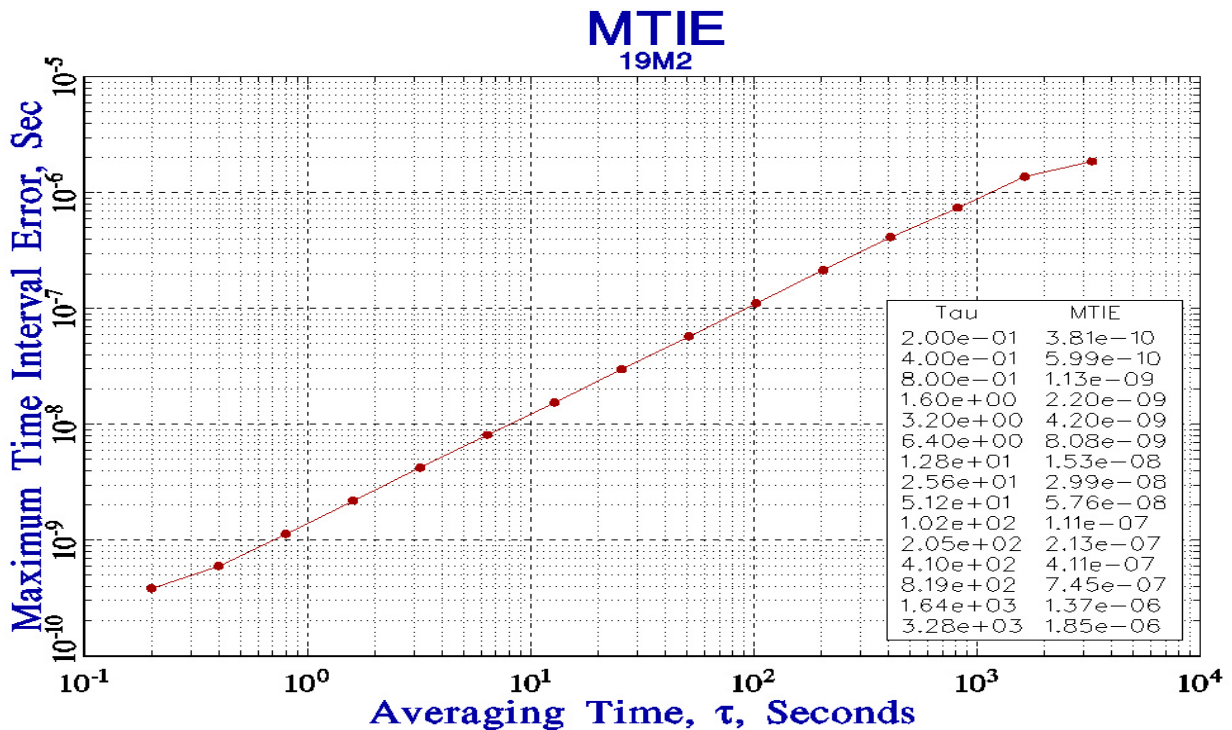
Electrical Specification for specified Vcc over the specified temperature range

Item	Min	TYP	Max	Unit	Condition
Frequency Range		16.384		MHz	
Frequency Stability ¹	-0.28		+0.28	ppm	Vcontrol @ 1.50 volts (Fmax-Fmin)/2
Holdover	-0.37		+0.37	ppm	GR-1244-CORE
Frequency Calibration	-0.5		+0.5	ppm	Frequency offset at 25°C, 60 minutes after reflow
Frequency Stability / Supply	-0.1		+0.1	ppm	Load: 10K ohm // 10 pF & Vcc ± 5%
Load Sensitivity	-0.2		+0.2	ppm	±2% variation in magnitude from 10K ohm ±10% 10 pF
Long Term Stability (Aging)	-3.4		+3.4	ppb	After 15 years.
Output Waveform	CMOS				
Output V _{HIGH} as % of Supply	90			%V _S	Load: 10K ohm ± 10% // 10 pF ± 10%
Output V _{LOW} as % of Supply			10	%V _S	
T _{RISE} and T _{FALL} (10% to 90%)			6.5	nS	
Duty Cycle at 50% Supply	40	50	60	%	
Phase Noise	10 Hz	-	-90	-	Typical values for a 20.0 MHz oscillator at 25°C
	100 Hz	-	-115	-	
	1 kHz	-	-135	-	
	10 kHz	-	-145	-	
Jitter	-	-	1.7	pS	10 Hz to 1 MHz offset from carrier
V Supply Range V _{CC}	3.15	3.3	3.45	Volts	
Supply Current I _{CC}	-	-	7.0	mA	
Vcontrol Range	0.5		2.50	Volts	1.50 volts nominal
Frequency Pullability	± 9.2	± 10.0	-	ppm	
Linearity	-	0.05	2.0	%	In accordance with MIL-PRF-55310
Operating Temperature Range	-40		+85	°C	
Storage Temperature Range	-55		+95	°C	

Phase Noise:



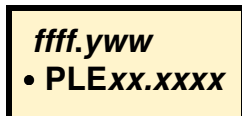
MTIE:



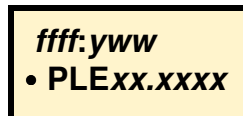
Reliability: Environmental Compliance

Parameter	Condition
Mechanical Shock	MIL-STD-883 Method 2002, Condition B
Vibration	MIL-STD-883 Method 2007, Condition A
Solderability	MIL-STD-883 Method 2003
Thermal Shock	MIL-STD-883 Method 1011, Condition A

Part Marking:



or

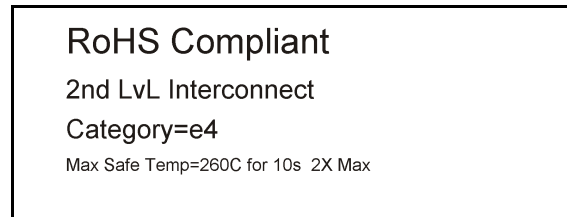
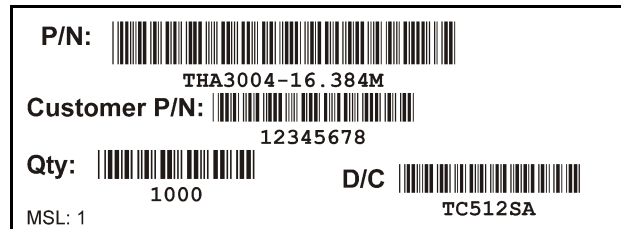


ffff.yww = frequency in MHz . Year week
 PLE = Pletronics
 xx.xxxx = internal code

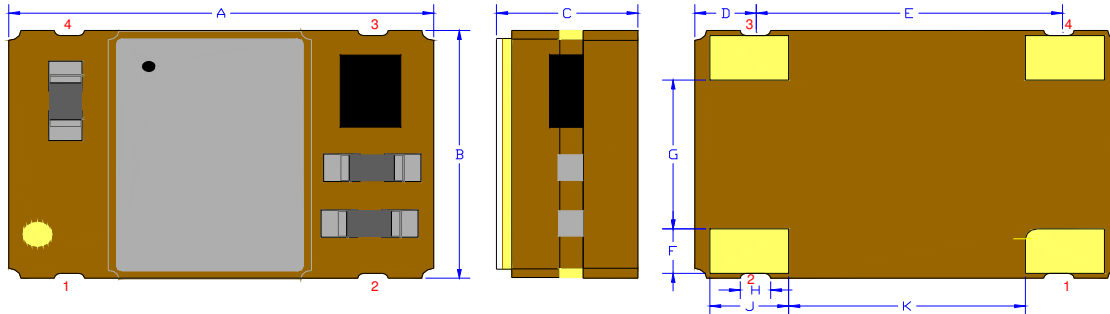
Package Labeling

Label is 1" x 2.6" (25.4mm x 66.7mm)
 Font is Courier New
 Bar code is 39-Full ASCII

Label is 1" x 2.6" (25.4mm x 66.7mm)
 Font is Arial



Mechanical:



Not to Scale

Pad	Function	Note
1	Vcontrol Input	If this function is not specified, recommend connecting this pad to ground.
2	Ground (GND)	
3	Output	
4	Supply Voltage (V_{CC})	Recommend connecting appropriate power supply bypass capacitors as close as possible.

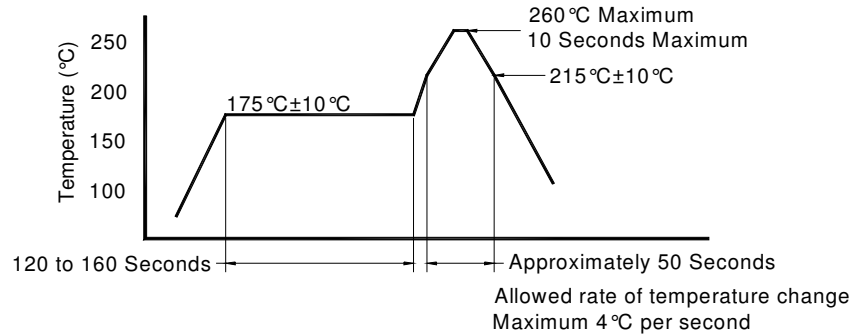
	Inches	mm
A	0.276 \pm 0.006	7.00 \pm 0.15
B	0.197 \pm 0.006	5.00 \pm 0.15
C	0.099 max	2.50 max
D ¹	0.039	1.00
E ¹	0.197	5.00
F ¹	0.025	0.90
G ¹	0.118	3.00
H ¹	0.020	0.50
J ¹	0.051	1.30
K ¹	0.154	3.90

¹ Typical dimensions

Contacts :

Gold 11.8 μ mches 0.3 μ m minimum over Nickel 50 to 350 μ mches 1.27 to 8.89 μ m

Reflow Cycle (typical for lead free processing)

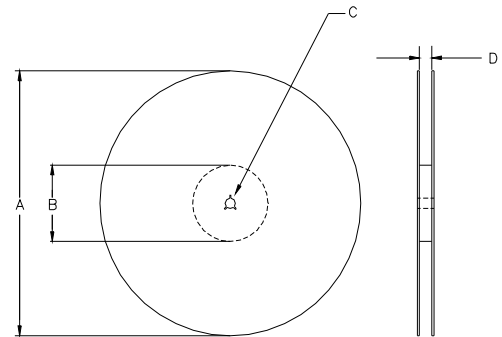


The part may be reflowed 2 times without degradation.

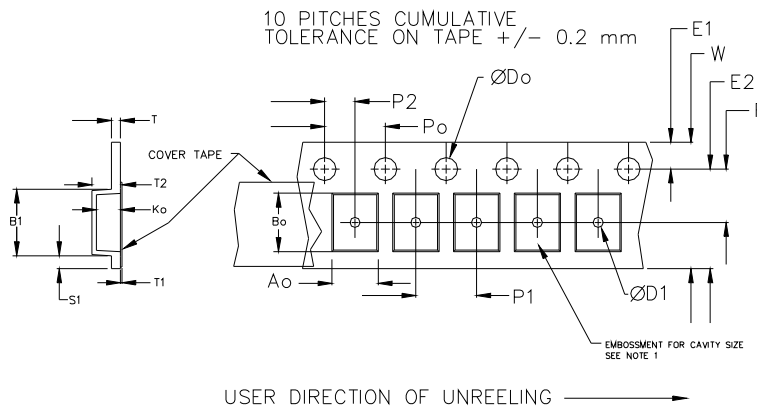
Tape and Reel: available for quantities of 250 to 1000 per reel, cut tape for < 250

Constant Dimensions Table 1								
Tape Size	D0	D1 Min	E1	P0	P2	S1 Min	T Max	T1 Max
8mm	1.5	1.0	1.75	4.0	2.0 ± 0.05	0.6	0.6	0.1
12mm		1.5			2.0 ± 0.1			
16mm		+0.1 -0.0			± 0.1			
24mm		1.5			± 0.1			

Variable Dimensions Table 2							
Tape Size	B1 Max	E2 Min	F	P1	T2 Max	W Max	Ao, Bo & Ko
16 mm	12.1	14.25	7.5 ± 0.1	8.0 ± 0.1	8.0	16.3	Note 1



Note 1: Embossed cavity to conform to EIA-481-B Dimensions in mm Not to scale



REEL DIMENSIONS					
A	inches	7.0	10.0	13.0	Tape Width
	mm	177.8	254.0	330.2	
B	inches	2.50	4.00	3.75	Tape Width
	mm	63.5	101.6	95.3	
C	mm	13.0 +0.5 / -0.2			Tape Width
D	mm	16.4 +2.0 -0.0	16.4 +2.0 -0.0	16.4 +2.0 -0.0	

Reel dimensions may vary from the above

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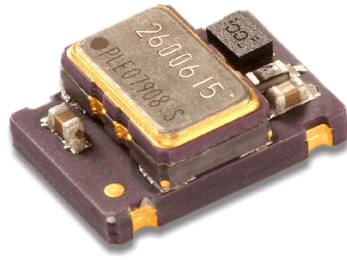
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Contacting Pletronics Inc.

Pletronics Inc.
19013 36th Ave. West
Lynnwood, WA 98036-5761 USA

Tel: 425-776-1880
Fax: 425-776-2760
E-mail: ple-sales@pletronics.com
URL: www.pletronics.com

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- Pletronics' THA3005-19.44 is a temperature compensated crystal oscillator
- Optional Voltage Control Function
- HCMOS output.
- The package is designed for high density surface mount designs.
- Tape and Reel packaging is available.
- Select Stratum-III frequencies available
- 5 x 7 mm LCC Ceramic Package

Pletronics Inc. certifies this device is in accordance with the RoHS 6/6 (2002/95/EC) and WEEE (2002/96/EC) directives.

Pletronics Inc. guarantees the device does not contain the following:

Cadmium, Hexavalent Chromium, Lead, Mercury, PBB's, PBDE's

Weight of the Device: 0.10 grams

Moisture Sensitivity Level: 1 As defined in J-STD-020D.1

Second Level Interconnect code: e4

Absolute Maximum Ratings:

Parameter	Unit
V _{CC} Supply Voltage	-0.5V to +6.5V
V _i Input Voltage	-0.5V to V _{CC} + 0.5V
V _o Output Voltage	-0.5V to V _{CC} + 0.5V

Thermal Characteristics

The maximum die or junction temperature is 155°C

The thermal resistance junction to board is 30 to 50°C/Watt depending on the solder pads, ground plane and construction of the PCB.

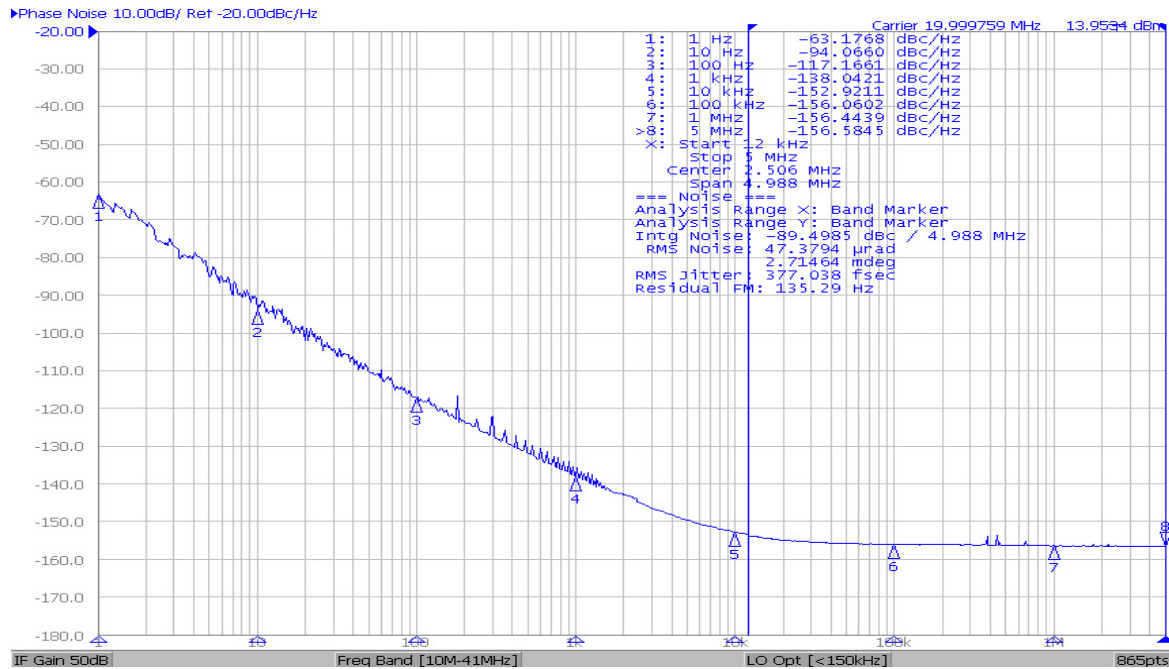
ESD Rating

Model	Minimum Voltage	Conditions
Human Body Model	1500	MIL-STD-883 Method 3115
Charged Device Model	1000	JESD 22-C101

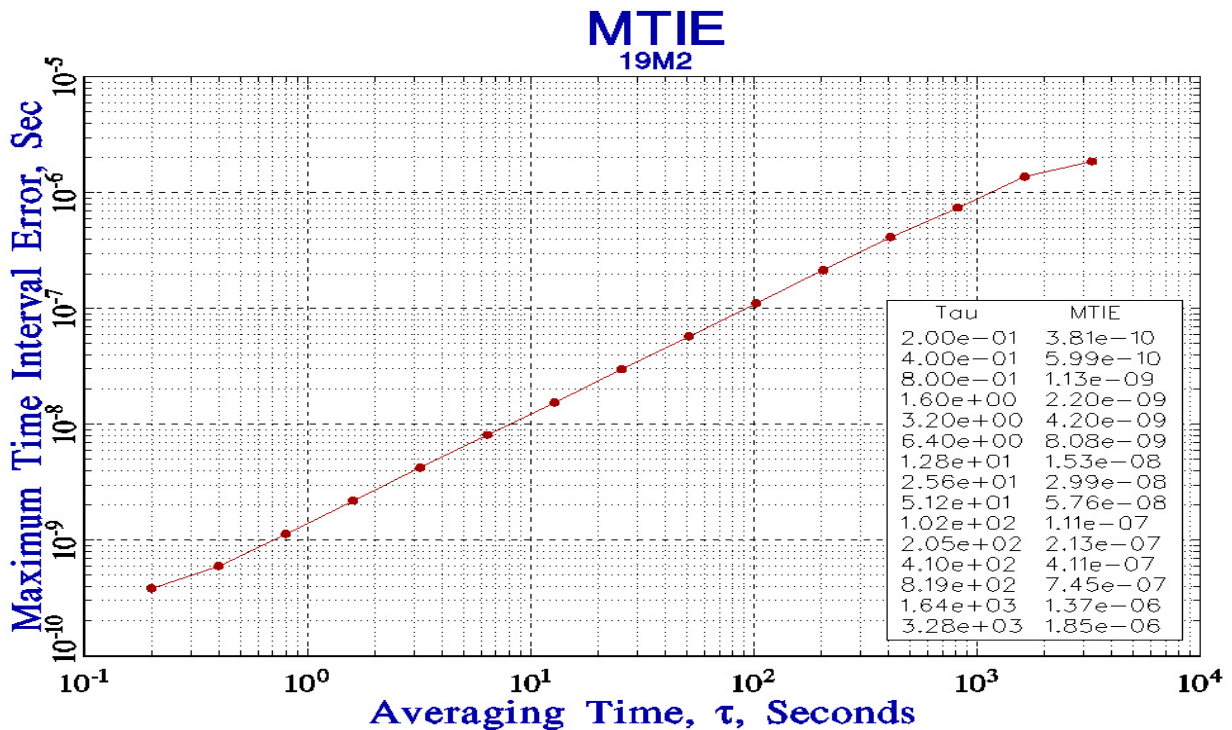
Electrical Specification for specified Vcc over the specified temperature range

Item	Min	TYP	Max	Unit	Condition
Frequency Range		19.44		MHz	
Frequency Stability ¹	-0.28		+0.28	ppm	Vcontrol @ 1.50 volts (Fmax-Fmin)/2
Holdover	-0.37		+0.37	ppm	GR-1244-CORE
Frequency Calibration	-0.5		+0.5	ppm	Frequency offset at 25°C, 60 minutes after reflow
Frequency Stability / Supply	-0.1		+0.1	ppm	Load: 10K ohm // 10 pF & Vcc ± 5%
Load Sensitivity	-0.2		+0.2	ppm	±2% variation in magnitude from 10K ohm ±10% 10 pF
Long Term Stability (Aging)	-3.4		+3.4	ppb	After 15 years.
Output Waveform	CMOS				
Output V _{HIGH} as % of Supply	90			%V _S	Load: 10K ohm ± 10% // 10 pF ± 10
Output V _{LOW} as % of Supply			10	%V _S	
T _{RISE} and T _{FALL} (10% to 90%)			6.5	nS	
Duty Cycle at 50% Supply	40	50	60	%	
Phase Noise	10 Hz	-	-90	-	Typical values for a 20.0 MHz oscillator at 25°C
	100 Hz	-	-115	-	
	1 kHz	-	-135	-	
	10 kHz	-	-145	-	
Jitter	-	-	1.7	PS	10 Hz to 1 MHz offset from carrier
V Supply Range V _{CC}	3.15	3.3	3.45	Volts	
Supply Current I _{CC}	-	-	7.0	mA	
Vcontrol Range	0.5		2.50	Volts	1.50 volts nominal
Frequency Pullability	± 9.2	± 10.0	-	ppm	
Linearity	-	0.05	2.0	%	In accordance with MIL-PRF-55310
Operating Temperature Range	-40		+85	°C	
Storage Temperature Range	-55		+95	°C	

Phase Noise:



MTIE:



Reliability: Environmental Compliance

Parameter	Condition
Mechanical Shock	MIL-STD-883 Method 2002, Condition B
Vibration	MIL-STD-883 Method 2007, Condition A
Solderability	MIL-STD-883 Method 2003
Thermal Shock	MIL-STD-883 Method 1011, Condition A

Part Marking:

ffff.yww
• PLExx.xxxx

or

ffff.yww
• PLExx.xxxx





ffff.yww = frequency in MHz . Year week
 PLE = Pletronics
 xx.xxxx = internal code

*** Device marking will show 38.88 MHz. Actual output will be 19.44 MHz.**

Package Labeling

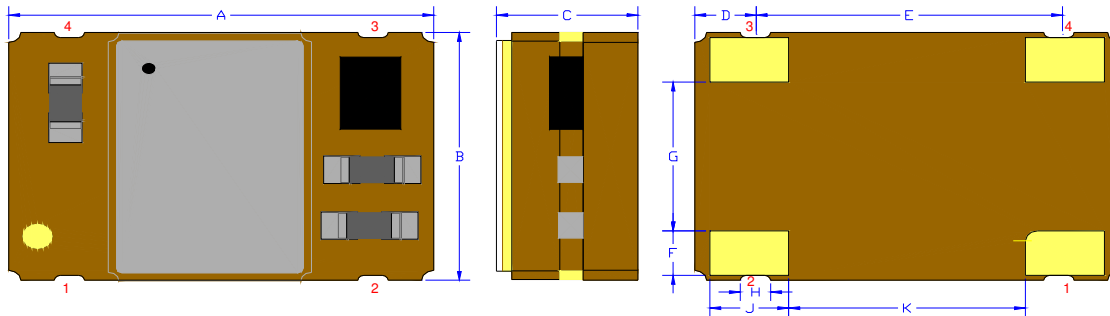
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 Font is Courier New
 Bar code is 39-Full ASCII

Label is 1" x 2.6" (25.4mm x 66.7mm)
 Font is Arial

P/N:	
	THA3005-19.44M
Customer P/N:	
	12345678
Qty:	
	1000
D/C:	
	TC512SA
MSL: 1	

RoHS Compliant
2nd LvL Interconnect
Category=e4
Max Safe Temp=260C for 10s 2X Max

Mechanical:



Not to Scale

Pad	Function	Note
1	Vcontrol Input	If this function is not specified, recommend connecting this pad to ground.
2	Ground (GND)	
3	Output	
4	Supply Voltage (V_{CC})	Recommend connecting appropriate power supply bypass capacitors as close as possible.

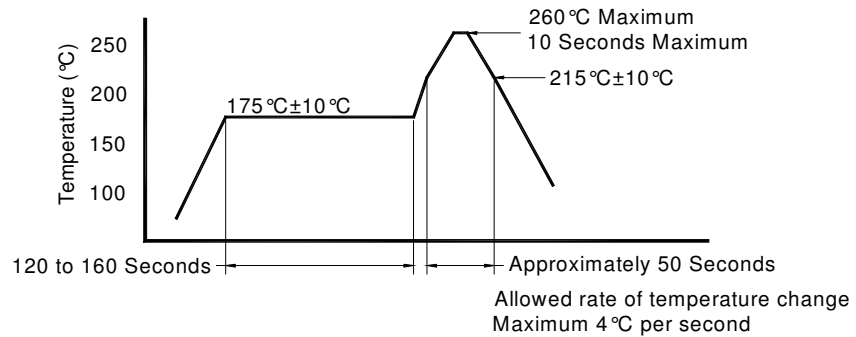
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B	0.197 \pm 0.006	5.00 \pm 0.15
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¹ Typic dimensions

Contacts :

Gold 11.8 μ inches 0.3 μ m minimum over Nickel 50 to 350 μ inches 1.27 to 8.89 μ m

Reflow Cycle (typical for lead free processing)

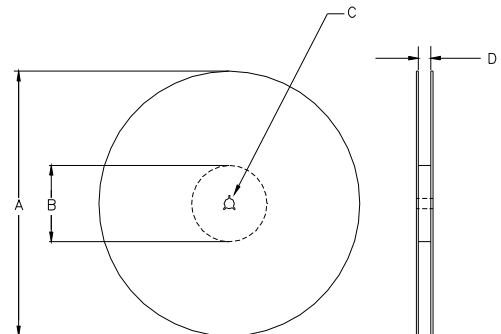


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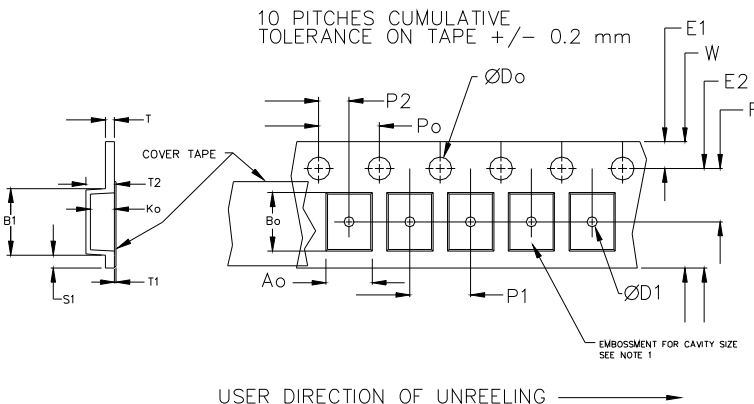
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16mm	+0.1 -0.0	1.5	±0.1	±0.1	2.0 ±0.1			
24mm		1.5						

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Note 1: Embossed cavity to conform to EIA-481-B Dimensions in mm Not to scale



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Reel dimensions may vary from the above

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URL: www.pletronics.com

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