

FEATURES

- HIGH RELIABILITY FOR LOW COST
- LOW PROFILE - 3.2 MM MAX. PACKAGE HEIGHT
- EXTENDED TEMPERATURE RANGE TO -40/+125°C
- TUNABLE WITH EXTERNAL CAPACITY
- CHEAPEST AVAILABLE SMD-CRYSTAL
- EXCELLENT CLOCK SIGNAL GENERATOR FOR CPU'S
- QUALIFIED FOR QUOTMOTIVE APPLICATIONS

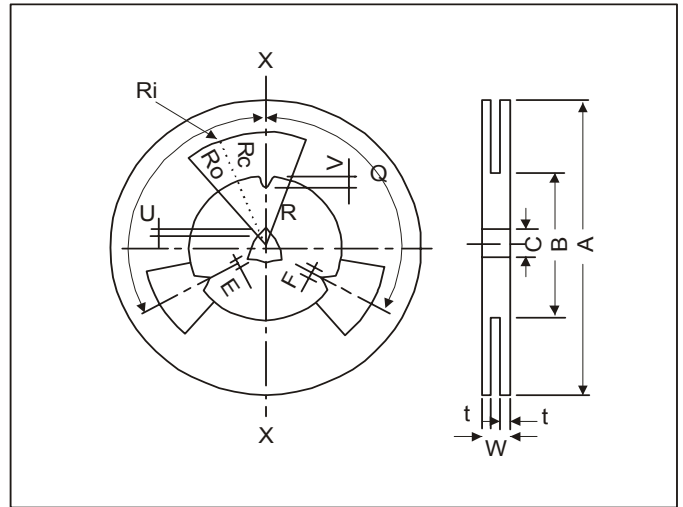
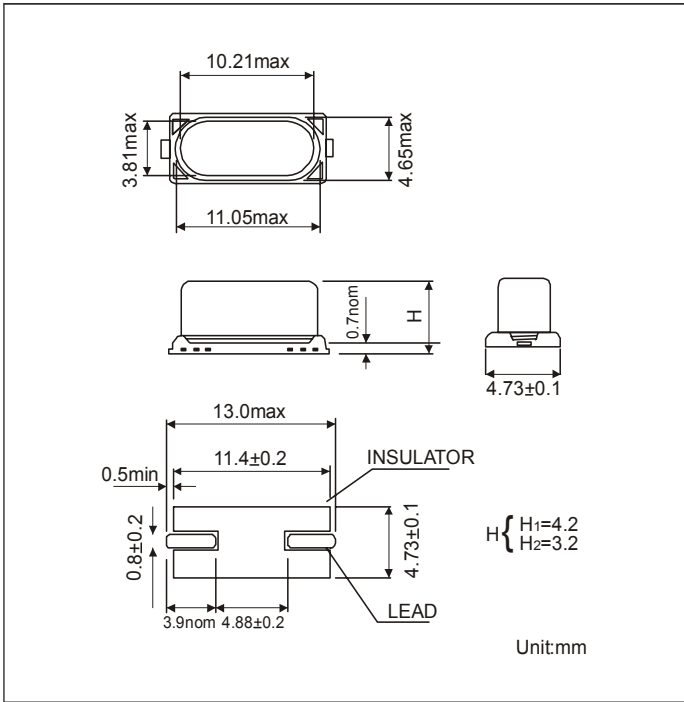
PROCESSOR TYPE		NOGATECH NT1004
SERIES		HC-49/US-SMD
PACKAGE HEIGHT	STANDARD	4.2 MM MAX.
	OPTION	4.0 MM MAX AND 3.2 MM MAX.
FREQUENCY		12.000 MHz
MODE OF VIBRATION		AT-FUNDAMENTAL
RESONANCE RESISTANCE		60 Ω MAX.
FREQUENCY TOLERANCE AT 25°C		+50 PPM
TEMPERATURE RANGE		0/+70°C
TEMPERATURE STABILITY		+50 PPM
LOAD CAPACITANCE		20 pF
SHUNT CAPACITANCE		7 PF MAX.
DRIVE LEVEL		0.5 mW
AGING		+5 PPM MAX. PER YEAR
INSULATION RESISTANCE		>500 MΩ DC/100V +-10%
PACKAGE		TAPE AND REEL (1.000 PCS PER REEL)
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION		

PART NUMBERING SYSTEM

EXAMPLE	HC-49/US-SMD 12.000 MHz NT1004
TYPE	HC-49/US-SMD
PACKAGE HEIGHT	BLANK FOR 4.2 MM
	4.0 OR 3.2 MM
PROCESSOR TYPE	NOGATECH NT1004

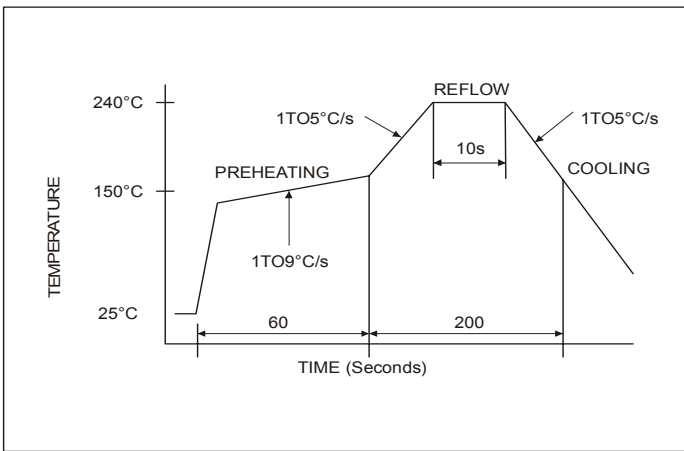
OUTLINE DRAWING OF HC-49/US-SMD

REEL SPECIFICATION

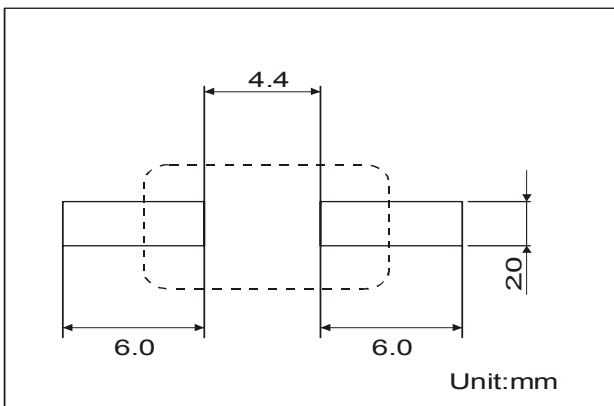


Description		Symbol	Dimensions	
Flange	Diameter	A	$\varnothing 330 \pm 2.0$	
	Thickness	t	2.4 ± 0.2	
	Width Between Flanges	W	$24.4^{+2.0}_{-0}$	
Center Core	Outline Diameter	B	$\varnothing 100 \pm 2.0$	
	Center Core Slit	Width	F	2.3 ± 1.0
		Deep	V	6 ± 1.0
		Position	Q	$120^\circ \pm 3^\circ$
	Spindle Diameter	C	$\varnothing 13 \pm 0.5$	
	Key Seats	Width	E	$2.5^{+0.5}_{-0}$
Deep		U	5 ± 0.5	
Position		Q	$120^\circ \pm 3^\circ$	
Fenestra	Outline Radius	R0	$R90 \pm 1.0$	
	Inline Radius	Ri	$R40 \pm 1.0$	
	Rounded Corners	Rc	R5	
	Open Angle	R	$40^\circ \pm 2^\circ$	

REFLOW SOLDER PROFILE



RECOMMENDED PAD LAYOUT



TAPING SPECIFICATION

