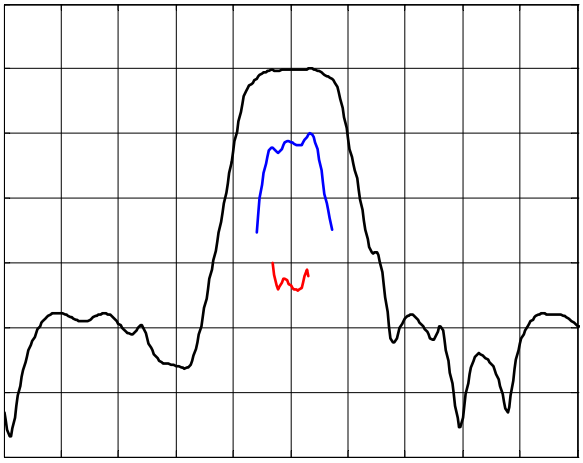
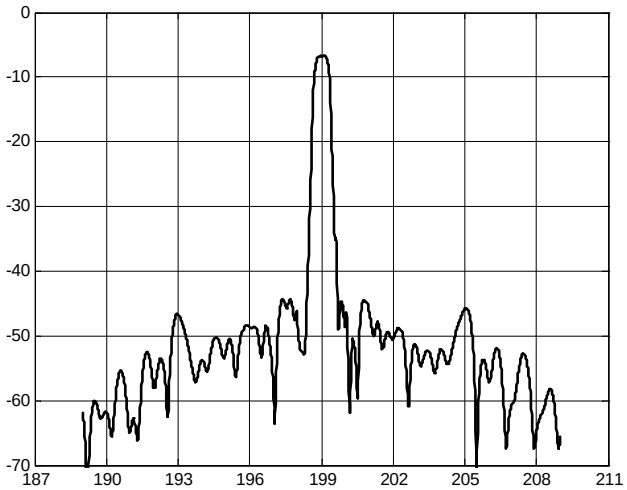
TYPICAL PERFORMANCE



Horizontal: 0.40 MHz/div
Vertical (from top): Magnitude 10 dB/div
Magnitude 1 dB/div
Group Delay 500 ns/div



Horizontal: 3.0 MHz/div
Vertical: Magnitude 10 dB/div

SPECIFICATION

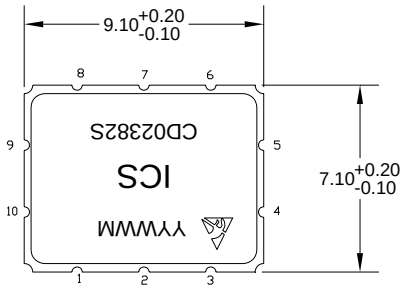
Parameter	Min	Typ	Max	Units
Normal Center Frequency F_C		199.00		MHz
Insertion Loss at Fc [1]		7	8	dB
1 dB Bandwidth	200	470		KHz
Passband Ripples over Fc+/-100 KHz		0.25	0.5	dB p-p
Group Delay Ripples over Fc+/-100 KHz		175	500	ns p-p
Rejection, F_C ± (0.600 to 0.800) MHz	20			dB
Rejection, F_C ± (0.800 to 17.00) MHz	30			dB
Rejection, F_C ± (17.00 to 80.00) MHz	35	52		dB
Operating Temperature Range	-35		+85	° C
Impedance Matching to 50 Ω Unbalanced	External L-C			
Impedance Matching to 200 Ω Balanced	External L-C			

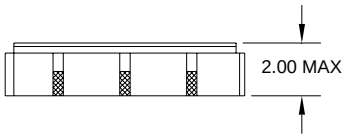
Note: 1. All dB values are referenced to the insertion loss value at Fc.

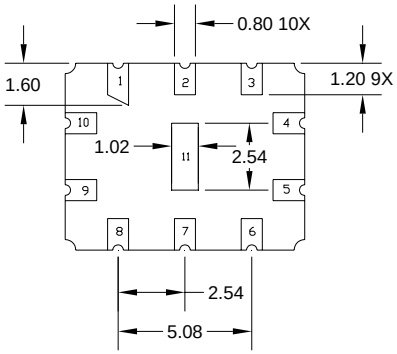
Integrated Circuit Systems • Surface Acoustic Wave Products
324 Clark Street, Worcester, MA 01606, USA • Phone 508-852-5400 • Fax 508-852-8456
www.icst.com

PACKAGE AND SUGGESTED PCB FOOTPRINT

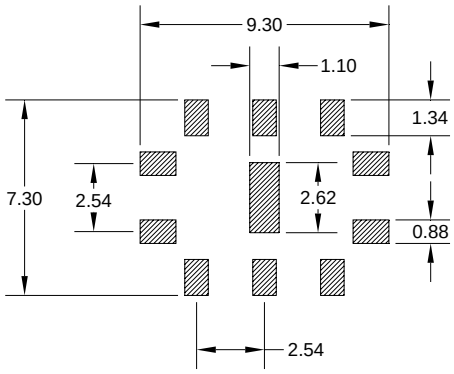
PACKAGE INFORMATION







SUGGESTED PCB FOOTPRINT

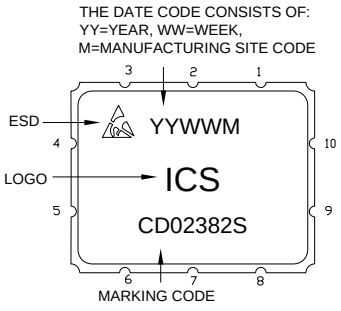


PIN NO.	DESCRIPTION
3	INPUT
2	INPUT RETURN
8	OUTPUT
7	OUTPUT RETURN
1,4,5,6,9,10,11	GROUND

NOTES:
DIMENSIONS SHOWN ARE NOMINAL IN MILLIMETERS. ALL TOLERANCES ARE ±0.15MM EXCEPT OVERALL LENGTH AND WIDTH

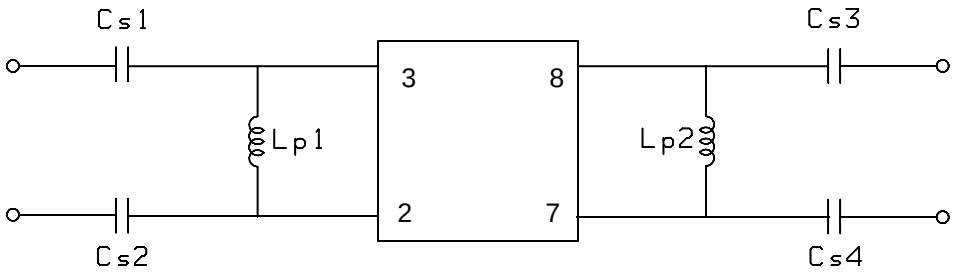
Package Material:
Body: Al_2O_3 ceramic
Lid: *Kovar*, *Ni* plated
Terminations: *Au* plating 0.5-1.0 um, over a 2-6 um *Ni* plating

MARKING



Integrated Circuit Systems • Surface Acoustic Wave Products
324 Clark Street, Worcester, MA 01606, USA • Phone 508-852-5400 • Fax 508-852-8456
www.icst.com

MATCHING CIRCUIT for Balanced, 200 Ω Impedance at Both Input and Output



Typical component values: Cs1 =Cs2=3.3 pF Cs3=Cs4=4.7 pF
Ls1 = 72 nH Ls2 = 68 nH

Note:
Component values may change depending on PCB layout and parasitic.

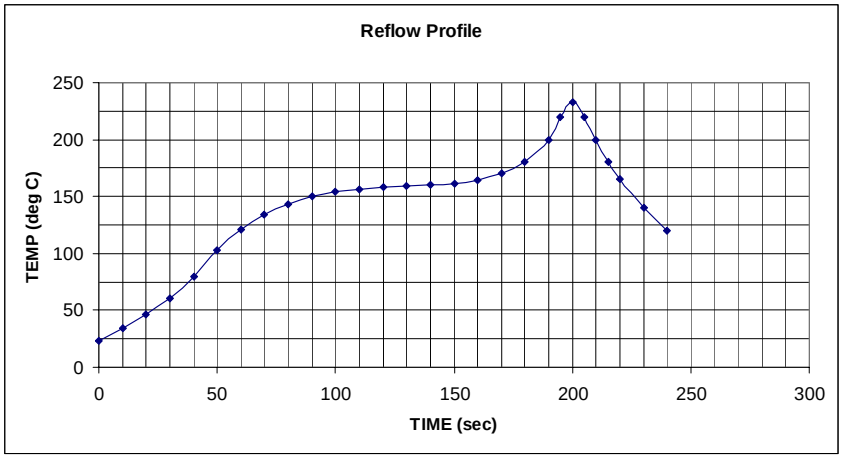
MAXIMUM RATINGS

Parameter	Min	Max	Units
Operating Temperature Range	-35	+85	ºC
Storage Temperature Range	-45	+85	ºC
Maximum Input Power Level		20	dBm
D. C. Voltage between Each Terminal		15	V

Integrated Circuit Systems • Surface Acoustic Wave Products
324 Clark Street, Worcester, MA 01606, USA • Phone 508-852-5400 • Fax 508-852-8456
www.icst.com

PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

Parameter	Qualification Conditions
Life Testing	High temperature bake at +85 ºC for 168 hours.
Temperature Cycling	MIL-STD 883, Method 1010: -40 ºC to +85 ºC, 10 cycles, 10 minutes dwell at temperature extremes
Vibration	MIL-STD-202, Method 201A: 10 to 55 Hz, double amplitude of 0.06" for 2 hours in each axis.
Mechanical Shock	MIL-STD-883, Method 2002, Test Condition B: 1500 g's, 3 impacts each axis
Solder Heat Resistance and Reflow Condition	Peak temperature 240+/-5 ºC for 10 seconds. Pre-heat: 150-170 ºC for 60 to 90 seconds. Peak dwell: over 200 ºC for 23 to 26 seconds. Handling: Class 1 per MIL-STD-1686 Reflow Profile is shown at the bottom of this table.
Lead Integrity	MIL-STD 883 Method 2004, Condition D 8 oz for 30 seconds.
Solderability	MIL-STD-883 Method 2003: 245 ºC +/-5 ºC; 95% coverage; no steam aging
Hermeticity	MIL-STD 883 Method 1014: Condition A2 and Condition C (no bomb)
ESD Classification	Class I per MIL-STD-883 Method 3015
Precautions	Do not subject devices to ultrasonic cleaning, which may cause deterioration and destruction of the device.



ISO 9001
Registered

Integrated Circuit Systems • Surface Acoustic Wave Products
324 Clark Street, Worcester, MA 01606, USA • Phone 508-852-5400 • Fax 508-852-8456
www.icst.com