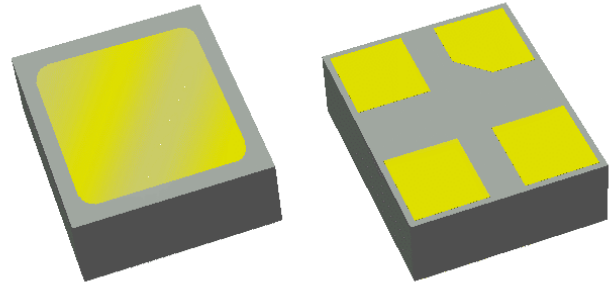


Data Sheet

Features

- For EGSM applications
- Usable bandwidth 35 MHz
- High attenuation
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size

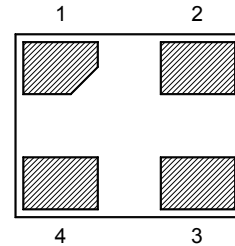
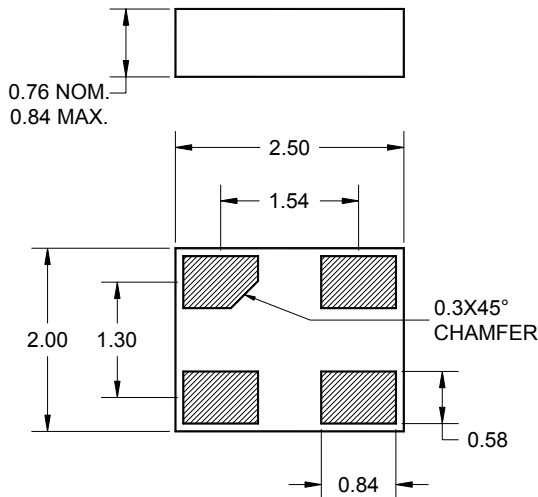


Package

Surface Mount 2.50 x 2.00 x 0.76 mm

Pin Configuration

Bottom View



Pin No.	Description
1	Input
3	Output
2,4	Case ground

Dimensions shown are nominal in millimeters
All tolerances are ±0.10mm

Body: Al_2O_3 ceramic
Lid: Kovar or Alloy 42, Au over Ni plated
Terminations: Au plating 0.5 - 1.0μm,
over a 2 - 6μm Ni plating

Data Sheet

Electrical Specifications ⁽¹⁾

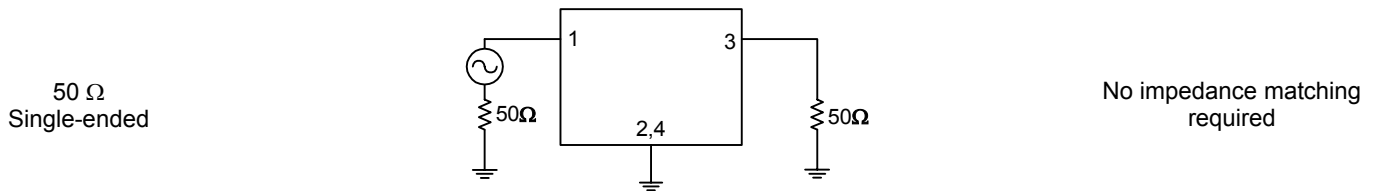
Operating Temperature Range: ⁽²⁾ -20 to +70 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	942.5	-	MHz
Maximum Insertion Loss				
925 - 960 MHz (+15 to +35 °C)	-	2.0	3.5	dB
925 - 960 MHz (-20 to +70 °C)	-	3.5	3.9	dB
Absolute Attenuation				
0 - 880 MHz	45	50	-	dB
880 - 905 MHz	31	48	-	dB
905 - 915 MHz	15	30	-	dB
980 - 982 MHz	20	27	-	dB
982 - 1005 MHz	23	30	-	dB
1005 - 1035 MHz	35	43	-	dB
1035 - 1760 MHz	40	47	-	dB
1760 - 2500 MHz	30	32	-	dB
2500 - 3120 MHz	20	30	-	dB
3120 - 4000 MHz	15	30	-	dB
Input/Output Return Loss				
925 - 960 MHz	8	13	-	dB
Source Impedance ⁽⁴⁾	-	50	-	Ω
Load Impedance ⁽⁴⁾	-	50	-	Ω

Notes:

1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. This is the optimum impedance in order to achieve the performance shown

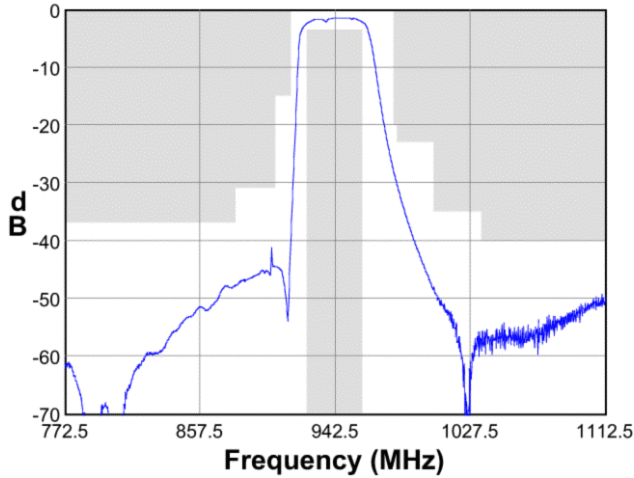
Test Circuit:



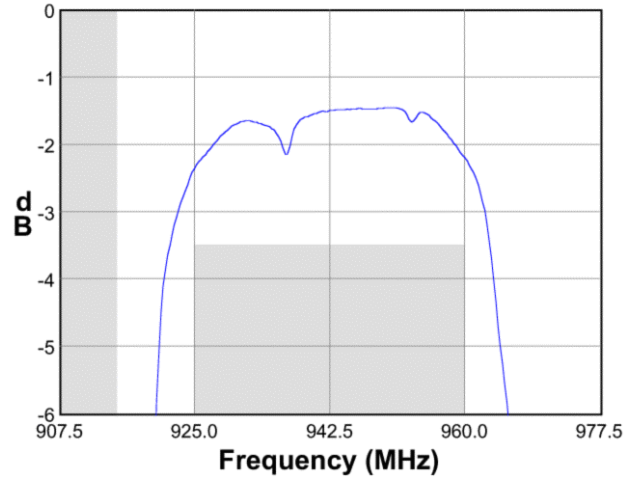
Data Sheet

Typical Performance (at +25°C)

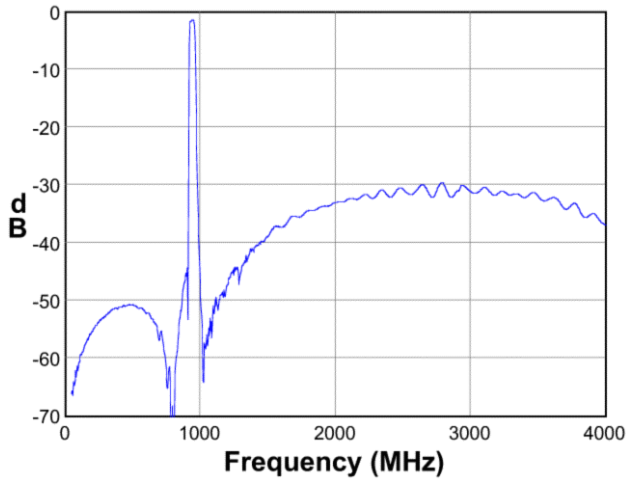
Frequency Response



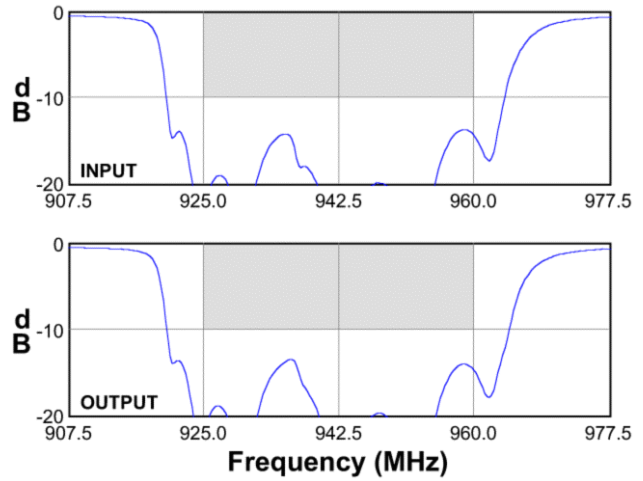
Passband Response



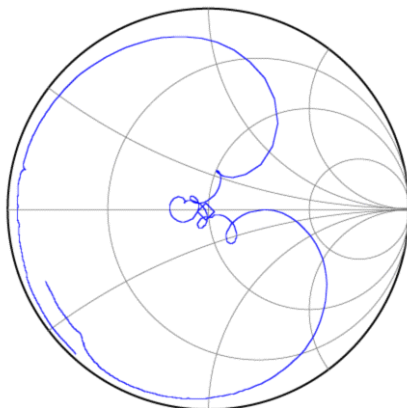
Wideband Response



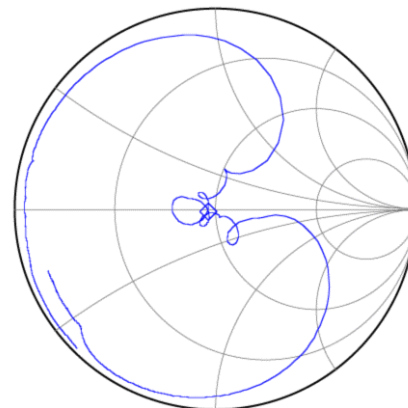
Input/Output Return Loss



Input Smith Chart



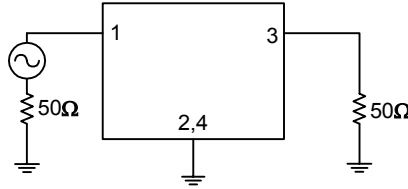
Output Smith Chart



Data Sheet

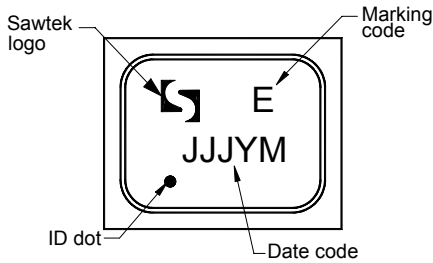
Matching Schematics

50 Ω
Single-ended



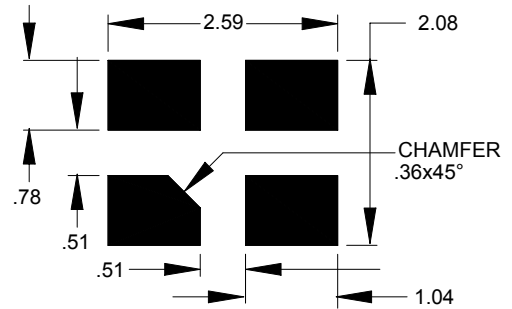
No impedance matching required

Marking



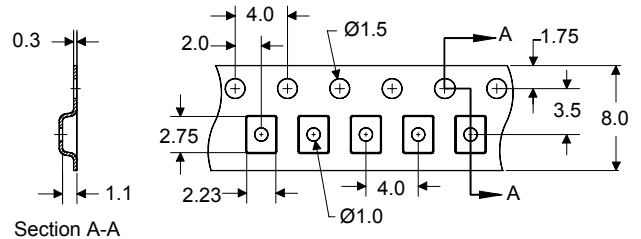
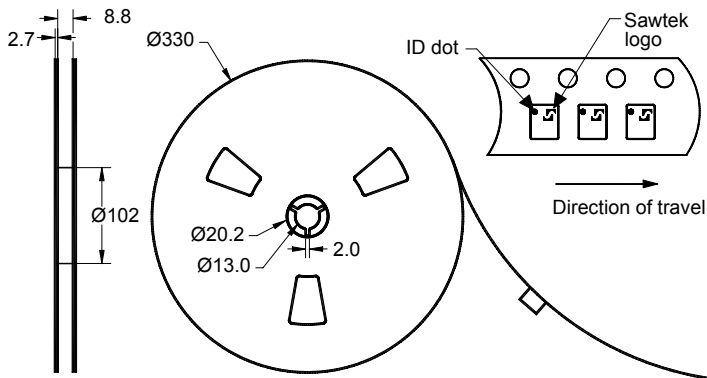
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

PCB Footprint



This footprint represents a recommendation only
Dimensions shown are nominal in millimeters

Tape and Reel




Dimensions shown are nominal in millimeters
Packaging quantity: 10000 units/reel

Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-20	+70	°C
Storage Temperature Range	T _{stg}	-40	+85	°C

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Other Technical Information](#)

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