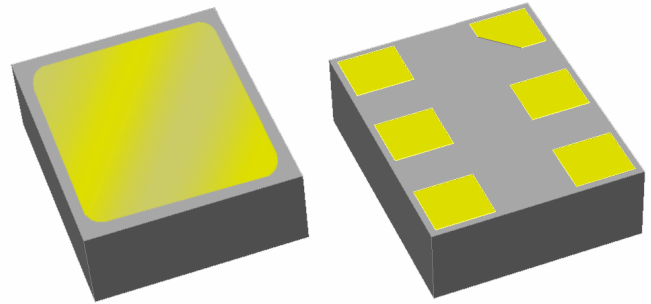


Data Sheet

Features

- For EGSM applications, Tx
- Usable bandwidth of 35 MHz
- High attenuation
- Balanced input
- Single-ended output
- Superior amplitude and phase balance
- Ceramic Surface Mount Package (SMP)
- Small size

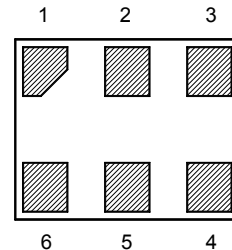
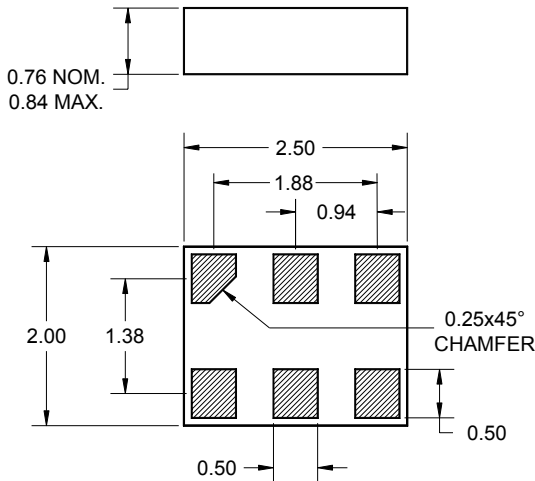


Package

Surface Mount 2.50 x 2.00 x 0.76 mm

Pin Configuration

Bottom View



Pin No.	Description
2	Output, Single-ended
4,6	Input, Balanced
1,3,5	Case Ground

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

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

Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature Range: ⁽²⁾ -10 to +80 °C

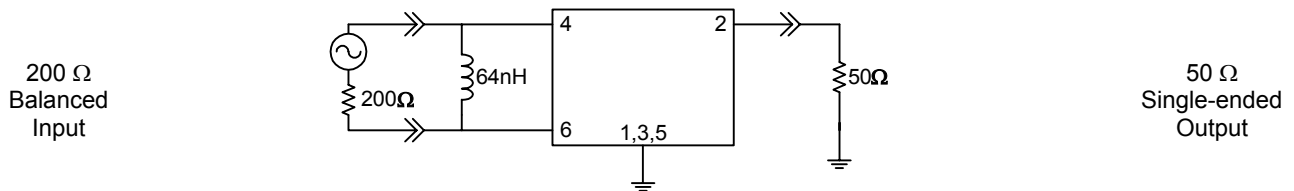
Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	897.5	-	MHz
Maximum Insertion Loss 880 - 915 MHz	-	2.2	3.2	dB
Absolute Attenuation ⁽⁴⁾				
DC - 850 MHz	45	54	-	dB
850 - 869 MHz	15	33	-	dB
935 - 960 MHz	20	28	-	dB
960 - 1850 MHz	40	48	-	dB
1850 - 3660 MHz	35	41	-	dB
3660 - 6000 MHz	25	33	-	dB
Amplitude Ripple 880 - 915 MHz	-	1.1	1.8	dB p-p
Amplitude Balance (S_{31}/S_{21}) 880 - 915 MHz	-1.5	1.0	1.5	dB
Phase Balance $\phi(S_{31}) - \phi(S_{21})$ 880 - 915 MHz	170	180	190	deg
Input/Output Return Loss 880 - 915 MHz	8.5	9.3	-	dB
Optimal Source Impedance ⁽⁴⁾	-	200 64nH	-	Ω
Optimal 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 complex conjugate of the unmatched filter's impedance resulting in maximum power transfer

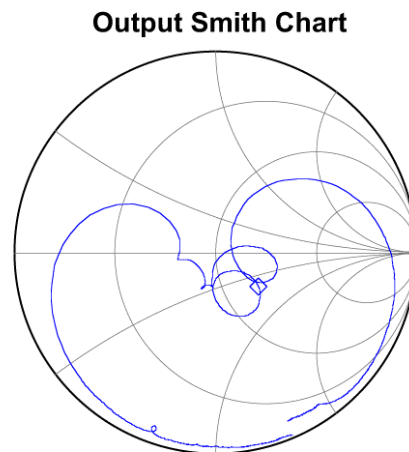
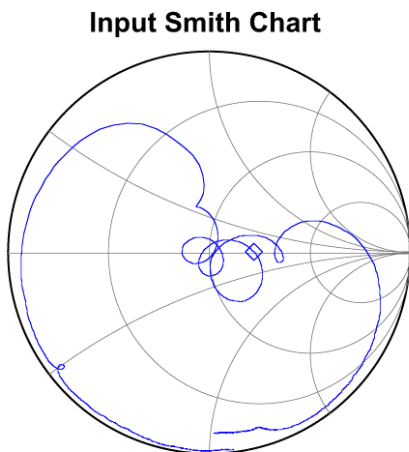
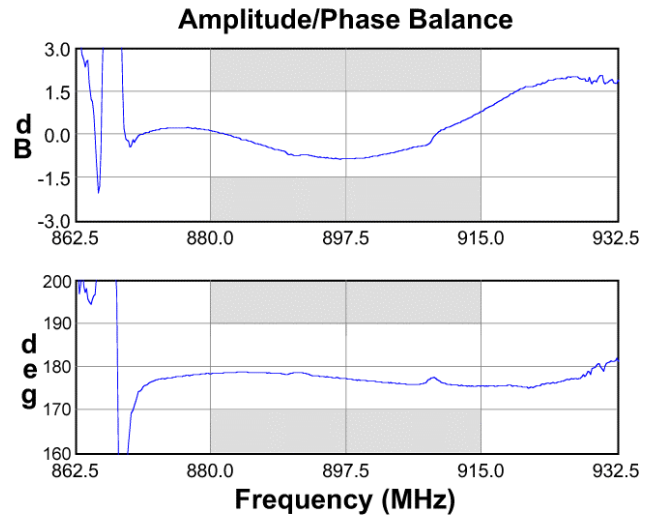
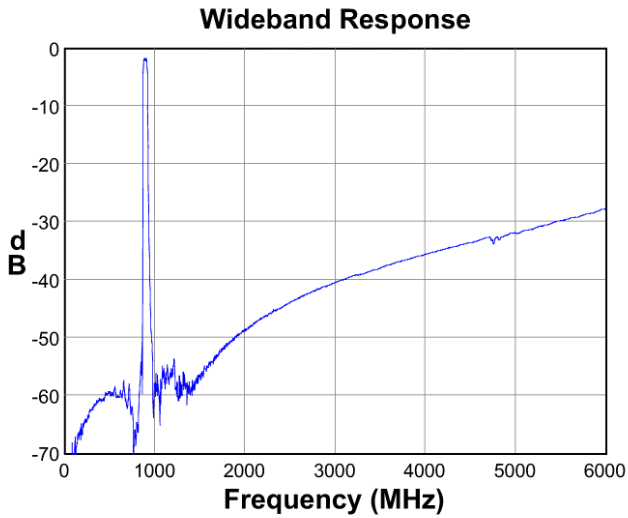
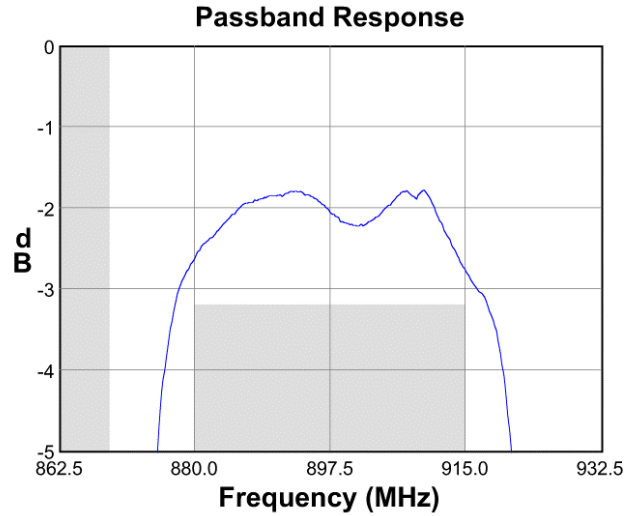
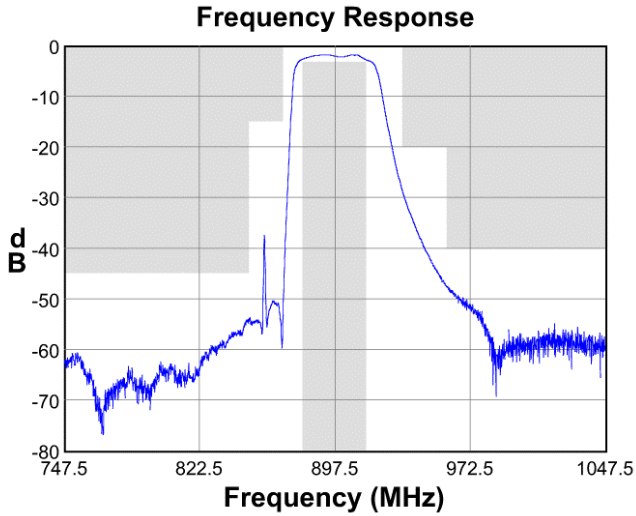
Test Circuit:

Actual matching values may vary due to PCB layout and parasitics



Data Sheet

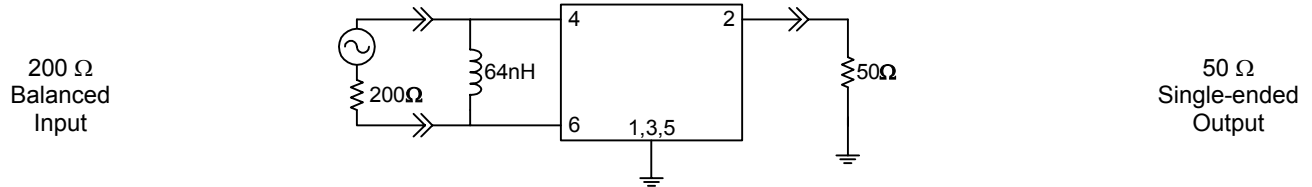
Typical Performance (at +25°C)



Data Sheet

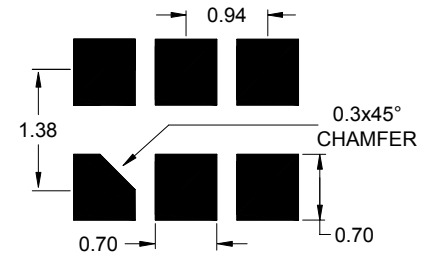
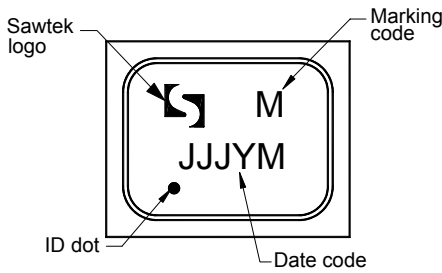
Matching Schematic

Actual matching values may vary due to PCB layout and parasitics



Marking

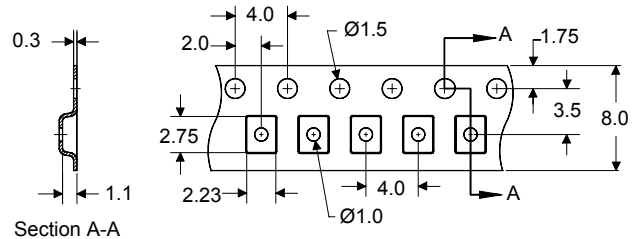
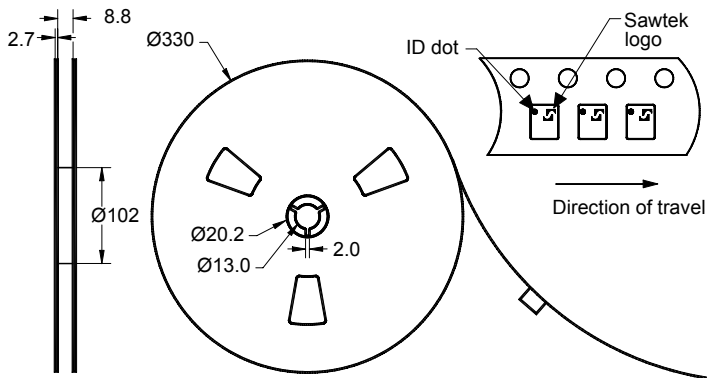
PCB Footprint



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

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	-10	+80	°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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