479.500 MHz SAW Filter for Satellite Receiver

- ***Ideal for DSB Wireless Receivers***
- ***Constant Group Delay***
- ***Improved ESD capability by integrated shunt resistors***
- ***Rugged, Hermetic, Low Profile TO-39 Package***

SF480-3

Absolute Maximum Rating (Ta=25°C)		
Parameter	Rating	Unit
DC Voltage V_{DC}	0	V
AC Voltage V_{pp}	5 (50Hz/60Hz)	V
Operating Temperature Range	-20 ~ +80	°C
Storage Temperature Range	-40 ~ +85	°C

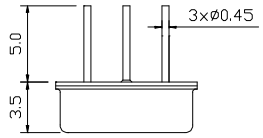
Specifications						
	Parameter	Sym	Minimum	Typical	Maximum	Unit
Frequency (25°C)	Nominal Frequency	fc	NS	479.500	NS	MHz
	Tolerance from 479.500 MHz	Δfc	-	±1.0	-	MHz
Insertion Loss		IL	-	20.0	21.5	dB
3dB Bandwidth		BW_3	25.6	26.6	27.6	MHz
Relative Attention	466.5 MHz	-	-	3.0	4.6	dB
	493.5 MHz	-	-	3.2	4.6	dB
Lower Sidelobe	430.0 ~ 455.5 MHz	-	40.0	46.0	-	dB
Upper Sidelobe	504.5 ~ 530.0 MHz	-	38.0	43.0	-	dB
Reflected Wave Signal Suppression 0.15μs ~ 2.0μs after Main Pulse		-	40.0	46.0	-	dB
Amplitude Ripple	473.50 ~ 486.50 MHz	-	-	0.3	0.5	dB
Group Delay Ripple	480.0 MHz	-	-	227.5	-	ns
Impedance at 480 MHz	Input Zin = Rin || Cin	-	-	60||4.8	-	Ω||pF
	Output Zout = Rout || Cout	-	-	260||3.1	-	Ω||pF
DC Resistance	Input Rin, Output Rout	-	-	500	-	Ω|
Temperature Coefficient of Frequency		FTC	-	-86	-	ppm/K
DC Insulation Resistance Between any Two Pins		-	1.0	-	-	MΩ

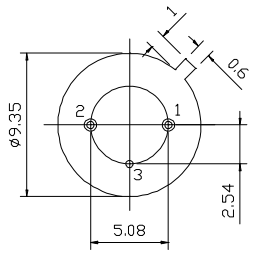
NS = Not Specified

Notes

1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture, which is connected to a 50 Ω test system (VSWR ≤ 1.2:1). The test fixture's L and C are adjusted for minimum insertion loss at the filter center frequency. fc Note the insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality. The optimum impedance matching component values are dependent on circuit parasitic losses.
2. The frequency fc is defined as the midpoint between the 3dB frequency.
3. Unless notes otherwise, specifications apply over the entire specified operating temperature range.
4. The design, manufacturing process, and specifications of this device are subject to change without notice.
5. The turnover temperature, To is the temperature of maximum (or turnover) frequency, fc the nominal frequency at any case temperature, TC, may be calculated from : $f = fc\ [\ 1- FTC(To-Tc)^2]$.

Package Outline (TO-39-3)





Pin	Connection
1	Input/Output
2	Output/Input
3	Ground

All dimensions are in mm

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