

SPECIFICATION OF SAW FILTER

YOKETAN CORP.

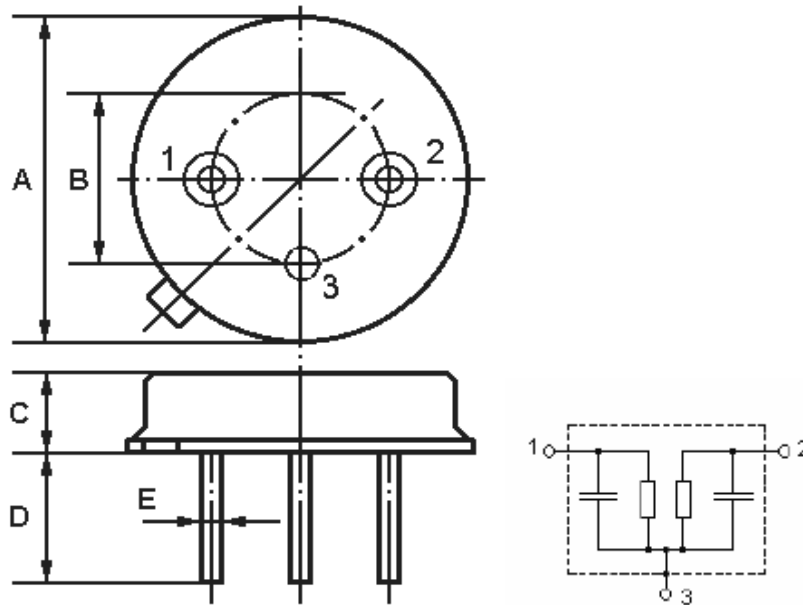
Spec no: TO39F-04795-008-NJ-A

1. Features

IF filter for DSB receivers with constant group delay.

2. Type : TO39

3. Product Dimension



Pin	Configuration
1	Input / Output
2	Output / Input
3	Case Ground

Sign	Data (unit: mm)	Sign	Data(unit: mm)
A	9.35±0.20	D	3±0.20
B	5.08±0.20	E	0.45±0.20
C	3.30±0.20		

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4. Performance

4-1. Maximum Ratings

Rating		Value	Units
AC Voltage Between Any Two Pins	VPP	5	V
DC Voltage Between Any Two Pins	VDC	0	V
Storage temperature range	Tstg	-40 to +85	
Operable temperature range	TA	-25 to +85	

4-2. Electronic Characteristics

Reference temperature : TA = 25

Terminating source impedance : ZS = 50 Ω

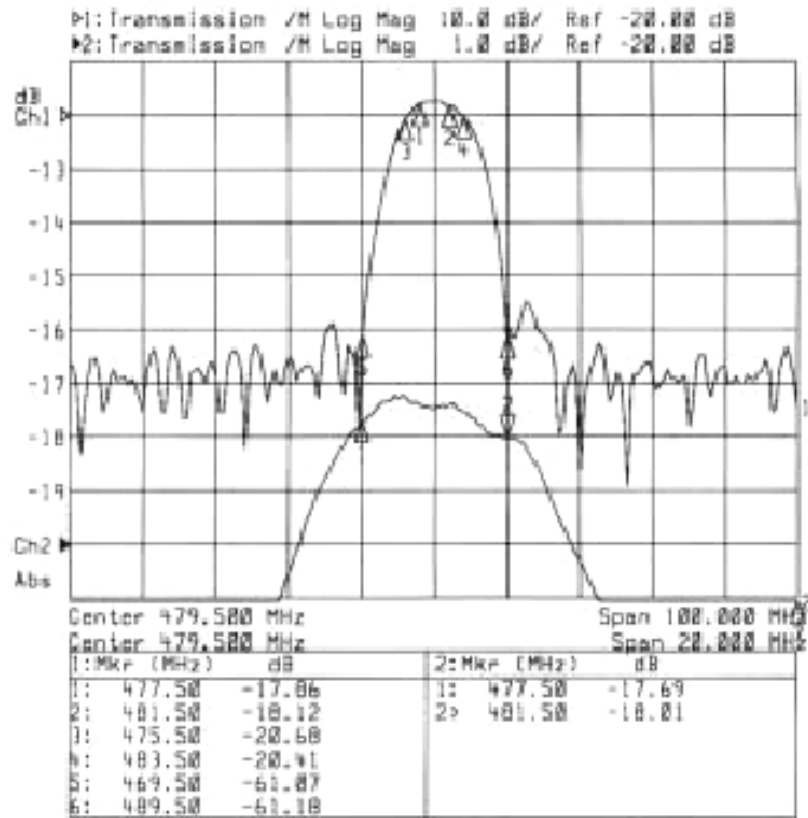
Terminating load impedance : ZL = 50 Ω

Item	Min.	Typ.	Max.	Units
Center Frequency fc	478.50	479.50	480.50	MHz
Insertion attenuation 479.50 MHz α (Reference level for the following data)	--	21.5	23.5	dB
Pass bandwidth αrel ≤ 3dB B3dB		8.0		M Hz
Relative attenuation αrel				
475.50 MHz	--	3.0	5.4	dB
483.50 MHz	--	2.6	5.3	dB
Lower sidelobe 409.50 464.50 MHz	37.0	45.0	--	dB
Upper sidelobe 491.00 498.50 MHz	34.0	41.0	--	dB
498.50 549.50 MHz	38.0	47.0		dB
Reflected wave signal suppression 0.19μs 2.0μs after main pulse	40.0	46.0	--	dB
Amplitude ripple (p-p) 477.50 . 481.50 MHz α	--	0.7	1.2	dB
Group delay ripple (p-p) 475.50 . 483.50 MHz τ	--	13.0	18.0	ns
Temperature coefficient of frequency TCf	--	-86	--	ppm/K

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5. Frequency Response



6. Notice

1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with $VSWR \leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
2. Frequency aging is the change in f_c with time and is specified at $+65^\circ\text{C}$ or less. Aging may exceed the specification for prolonged temperatures above $+65^\circ\text{C}$. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
3. Turnover temperature, T_0 , is the temperature of maximum (or turnover) frequency, f_0 . The nominal frequency at any case temperature, T_c , may be calculated from:
$$f = f_0 [1 - FTC (T_0 - T_c)^2].$$
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.