

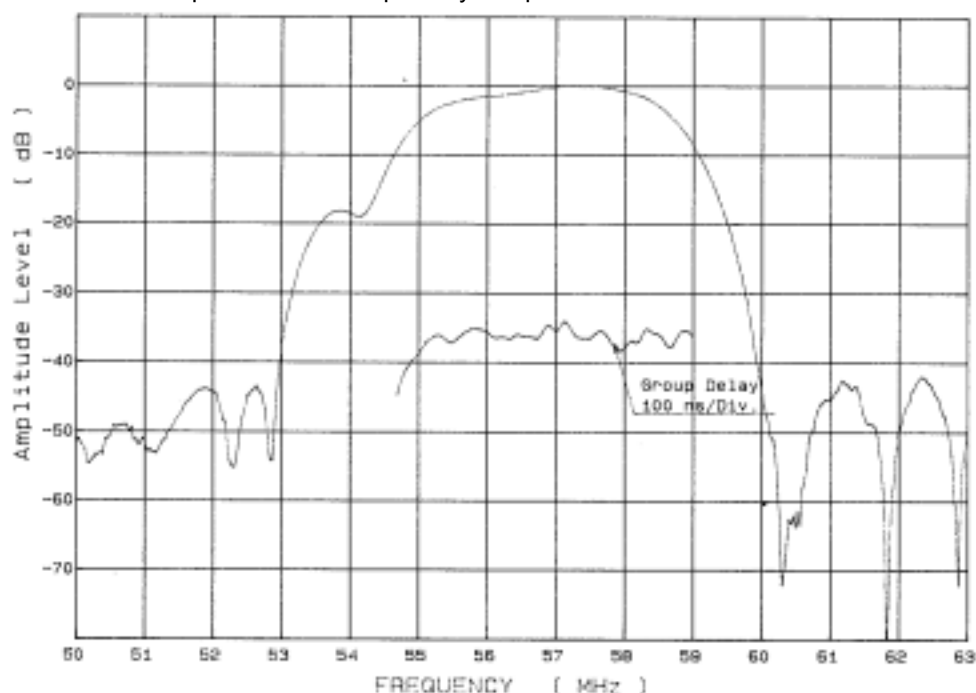
# TSF5103P

APPLICATION : IF Filter for Inter-Carrier

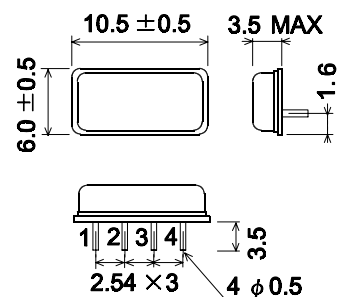
IF : 58.75 MHz

SYSTEM : M/N

Amplitude and Group Delay Response



Package ( P type )



Unit mm

## ELECTRIC CHARACTERISTICS (Ta = 25 (45) °C)

· Drive Impedance : 50 Ω · Load Impedance : 1.2 kΩ || 5 pF

| CHARACTERISTICS |                                                      | Freq.<br>(MHz)                  | SPECIFICATIONS |       |       | Unit    |
|-----------------|------------------------------------------------------|---------------------------------|----------------|-------|-------|---------|
|                 |                                                      |                                 | Upper          | Nom.  | Lower |         |
| 1               | Amplitude Response<br>Ref. : 57.08 MHz<br>(57.0 MHz) | 60.33 (60.25)                   | -40            | -57   |       | (dB)    |
|                 |                                                      | 58.83 (58.75)                   | -4.7           | -6.2  | -7.7  |         |
|                 |                                                      | 55.75 (55.67)                   | -0.8           | -1.8  | -2.8  |         |
|                 |                                                      | 55.25 (55.17)                   | -1.8           | -3.3  | -4.8  |         |
|                 |                                                      | 54.75 (54.67)                   | -5.7           | -8.2  | -10.7 |         |
|                 |                                                      | 54.33 (54.25)                   | -14.0          | -16.5 | -19.0 |         |
|                 |                                                      | 52.83 (52.75)                   | -39            | -54   |       |         |
| 2               | Spurious Response                                    | 45.08 (45.0)<br>~ 52.83 (52.75) | -35            | -39   |       | (dB)    |
|                 |                                                      | 60.33 (60.25)<br>~ 65.08 (65.0) | -35            | -42   |       |         |
| 3               | Group Delay<br>Ref. : 58.83 MHz<br>(58.75 MHz)       |                                 |                |       |       | (ns)    |
|                 |                                                      | 56.83 (56.75)                   |                | 0     |       |         |
|                 |                                                      | 55.25 (55.17)                   |                | -10   |       |         |
| 4               | Insertion Loss                                       | 57.08 (57.0)                    |                | -11.0 | -12.5 | (dB)    |
| 5               | Temperature Coefficient                              |                                 |                | -72   |       | ppm/ °C |
| 6               | Input Capacitance                                    | 1.0                             |                | 11.6  |       | (pF)    |
|                 | Input Resistance                                     | 57.08 (57.0)                    |                | 0.6   |       | (KΩ)    |
|                 | Output Capacitance                                   | 1.0                             |                | 6.1   |       | (pF)    |
|                 | Output Resistance                                    | 57.08 (57.0)                    |                | 0.5   |       | (KΩ)    |

Pin Connection

| NO. | FUNCTION |
|-----|----------|
| 1   | INPUT    |
| 2   | GND      |
| 3   | OUTPUT   |
| 4   | OUTPUT   |

Equivalent Circuit

