SOSHIN

MULTILAYERED FILTERS

CompoTRON

MDR 642E **Bandpass 2.45GHz** **Multilayer Dielectric Series**

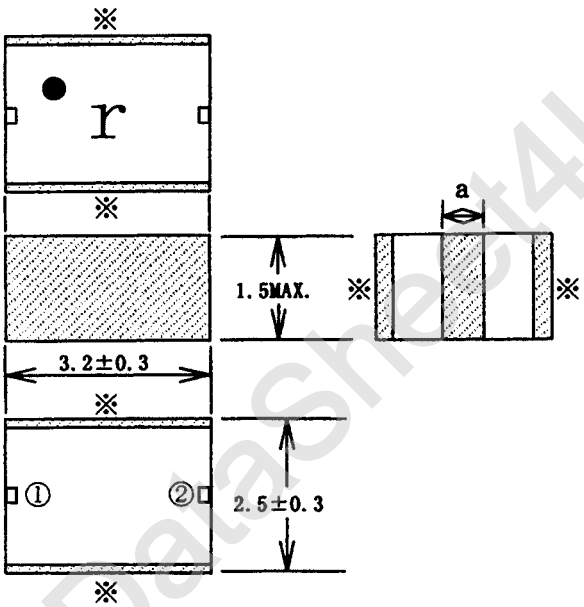
Product Features

- Small size
- Low loss and high attenuation
- SMD and reflow soldering is available

Applications

- Bluetooth / ISM 2.4

Dimension(Unit : mm)



Terminal	
①	Input
②	Output
※	GND

a =0.6±0.3

Electrical Characteristics

1. Zin & Zout	:	50Ω Nominal
2. fc	:	2450MHz Nominal
3. Pass Band	:	2400～2500MHz
4. Insertion Loss	:	2.5 dB MAX. (2400～2500MHz)
5. Ripple	:	1.2 dB MAX. (2400～2500MHz)
6. V.S.W.R	:	2.0 MAX. (2400～2500MHz)
7. Attenuation	:	40 dB MIN. (1750～1950MHz)
	:	35 dB MIN. (at 2100MHz)
	:	20 dB MIN. (at 2250MHz)
	:	30 dB MIN. (4800～5000MHz)

Minimum Ordering Quantity : 2,000pcs(per reel, per bag)

CompoTRON GmbH • Lindwurmstrasse 95 a • D – 80337 München • Fon 089 / 53 88 66-0 • Fax 089 / 53 81 93 77 • info@compotron.com • www.compotron.com

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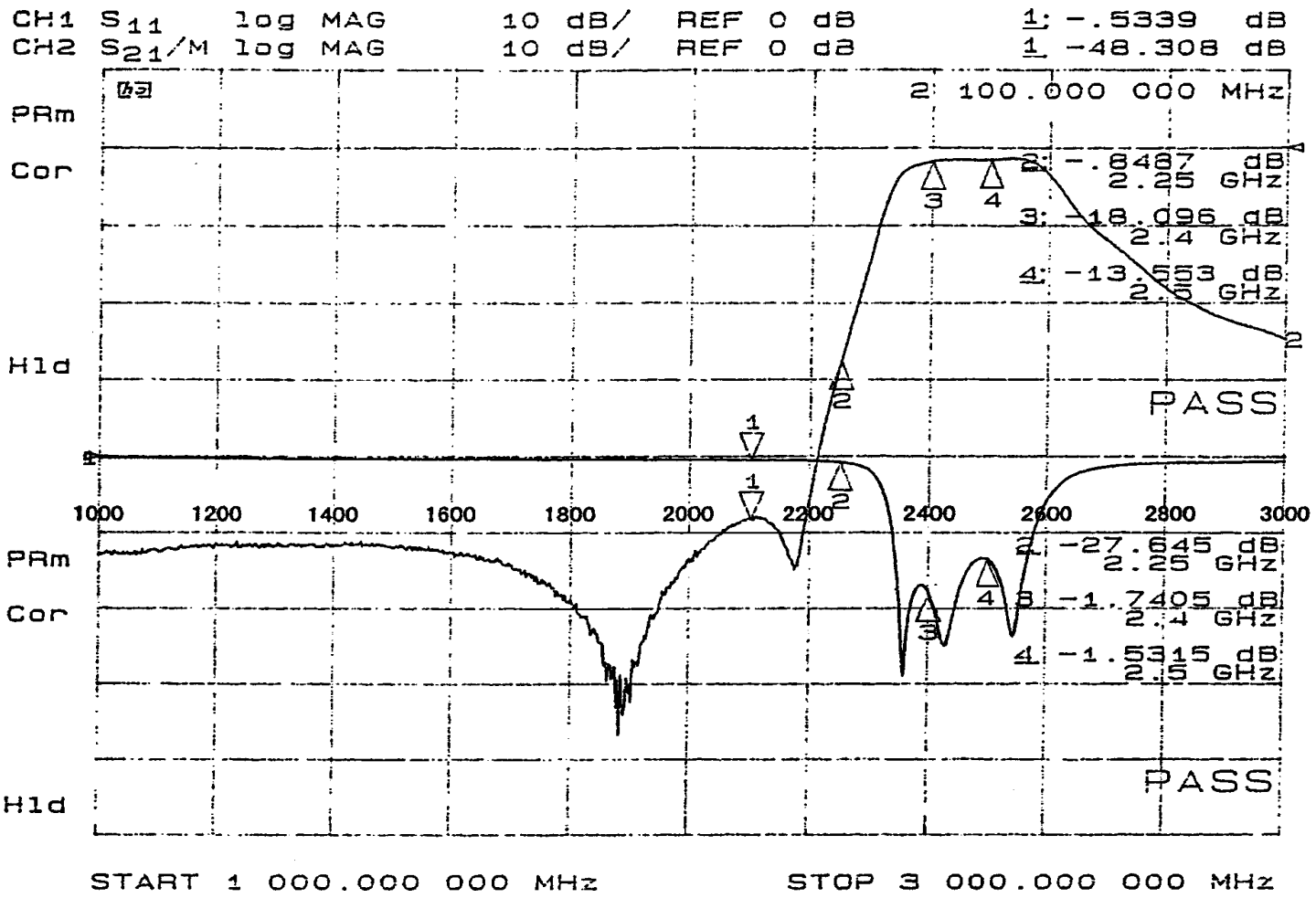

TYPE
MDR 642E

CH1 (S11)
MARK
1 : 2100 MHz
2 : 2250 MHz
3 : 2400 MHz
4 : 2500 MHz

CH2 (S21)
MARK
1 : 2100 MHz
2 : 2250 MHz
3 : 2400 MHz
4 : 2500 MHz

Measurement
Instrument
HP8753D
NETWORK
ANALYZER

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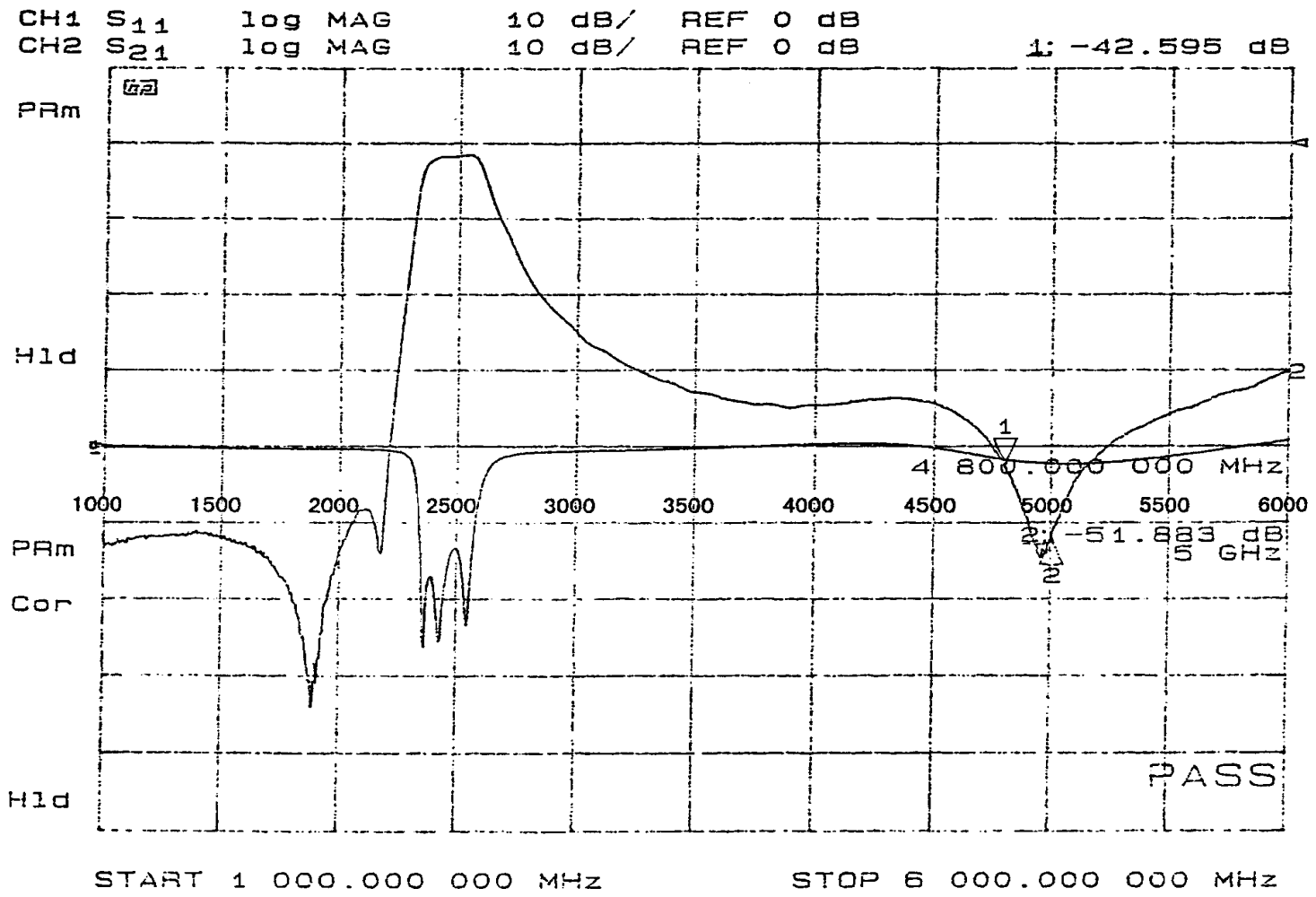

TYPE
MDR 642E

MARK
1 : 4800 MHz
2 : 5000 MHz

Measurement
Instrument
HP8753D
NETWORK
ANALYZER

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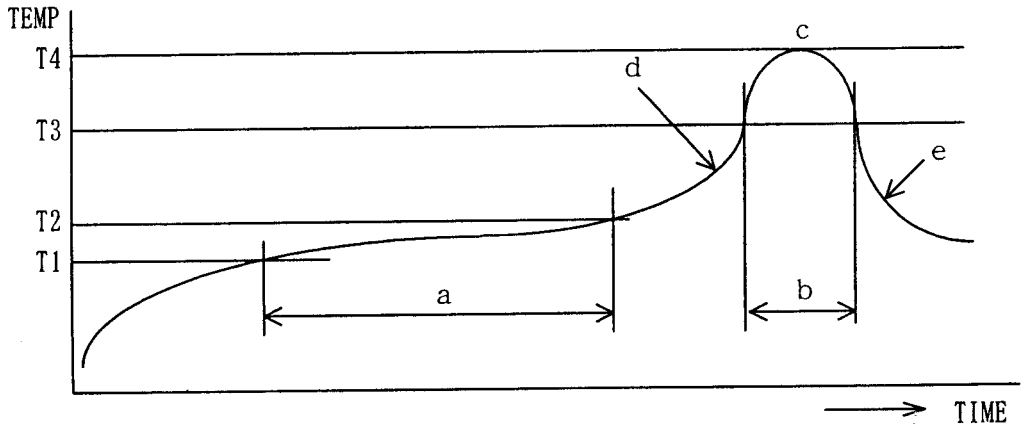
Reflow-soldering conditions (For reference)



(1) High temperature reflow-soldering conditions (No more than 2 flows allowed)
T1 : 130±10℃ , T2 : 150±10℃ , T3 : 200℃ , T4 : 240℃
a : Preheating 40 to 120 seconds
b : Heating 50 seconds
c : Peak temperature 240℃, max.
d : Temperature rising slope 10℃/1 second, max.
e : Temperature falling slope 8℃/1 second, max.

Dip-soldering conditions (For reference)
(1) Preheating : 100 to 150℃
(2) Solder bath temperature : 260±5℃
(3) Dipping time : 5±1 seconds

Cleaning conditions
(1) Cleaning agent : Isopropyl alcohol
(2) Dip cleaning : 30 minutes, max., at 40℃
(3) Vapor cleaning : 30 minutes, max.
(4) Ultrasonic cleaning : 1 minutes, max, with a maximum power of 10w

Recommended Repair Soldering Conditions

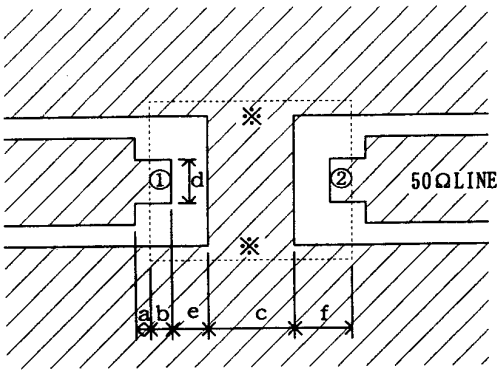
(1) Preheating Conditions
The temperature difference between soldering iron and device surface must be under 100℃.

(2) Recommended Condition of Soldering Iron
① Power : 20W MAX.
② Chip temperature : 270℃ MAX.
③ Dimension of iron chip : ~1 ϕ
④ Soldering time : 3 Seconds MAX.

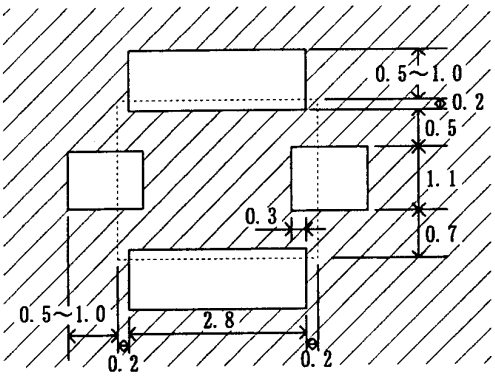
Recommended application conditions

1. Standard land dimensions (Unit : mm)

Land pattern



Resist pattern



Terminal	
①	Input
②	Output
※	GND

a =0.2
b =0.3
c =1.6
d =0.7
e =0.5
f =0.8
(Unit : mm)

Example) t =1.0mm
glass-epoxy board