

DATA SHEET

UM MODEL NO.:	SPECIFICATIONS	REV.	
UT41656	MODEM COUPLING TRANSFORMERS	B2	00/22

Features

- ◆ Surface mount
- ◆ Low distortion
- ◆ 7mm seated height
- ◆ IEC 950 Reinforced Isolation
- ◆ Withstands $230\pm 5^{\circ}\text{C}$ IR Reflow
- ◆ EN60950 certified

Applications

- ◆ Telecommunications
- ◆ V.34 Modems
- ◆ Portable Computers
- ◆ Fax / modems

Description

UT41656 is a microprofile transformer for applications where high performance and safety isolation to the most exacting international standards are required in an extremely small case size

The UT41656 offers fully reinforced isolation, is ideal for voice telecommunications and for data communications to the highest data rates whilst capable of being matched to both 600 ohm and complex impedance telephone line

At moderate transmit power levels (e.g. -10dBm) performance to V.34(28,800 bits/second) may be achieved

The UT41656 is certified to EN60950

Electrical specifications at 25°C

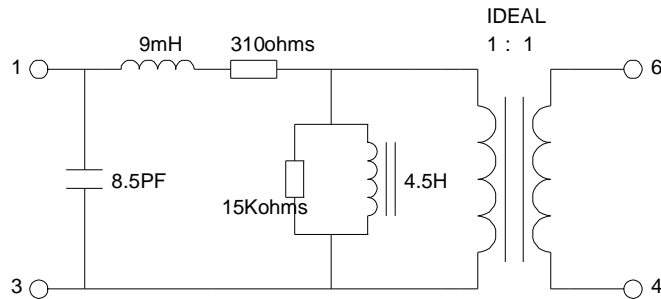
- 1.D.C.Resistance : $148\Omega\pm 15\%$, each windings
- 2.Inductance(Ls) : 1.9H Min. at 200Hz 250mV, each windings
0.6H Min. at 2KHz 250mV, each windings
0.4H Min. at 4KHz 250mV, each windings
- 3.AC Resistance(Rs): $1\text{K}\Omega$ Min. at 200Hz 250mV, each windings
 $7\text{K}\Omega$ Min. at 2KHz 250mV, each windings
 $11\text{K}\Omega$ Min. at 4KHz 250mV, each windings
- 4.Leakage Inductance: 14.4mH Max. at 200Hz ~ 4KHz, PIN(1-3):(4-6) shorted
- 5.Harmonic Distortion : 200Hz -3dBm PIN(1-3) Load 600Ω
2f: -60dB Max.
3f: -47dB Max.
THD : -43dB Max.
- 6.Insertion Loss: 2.6dB Max. at 200 ~ 4KHz
- 7.Frequency Response : $\pm 0.4\text{dB}$ Max. at 200 ~ 4KHz , 1KHz 0dB Ref.
(600Ω Ref. 600 Load)
- 8.Return Loss: 23dB Min. at 300 ~ 4KHz , 600Ω Ref.
- 9.Hi-Pot : 4.0KVrms 0.5mA 2sec. Pri. to Sec.



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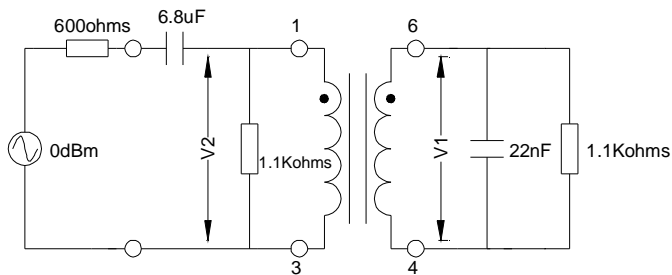
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Equivalent Circuit

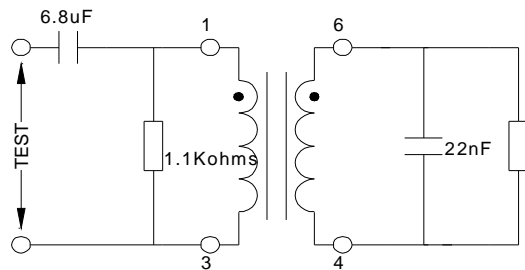


Test Circuit

Insertion Loss

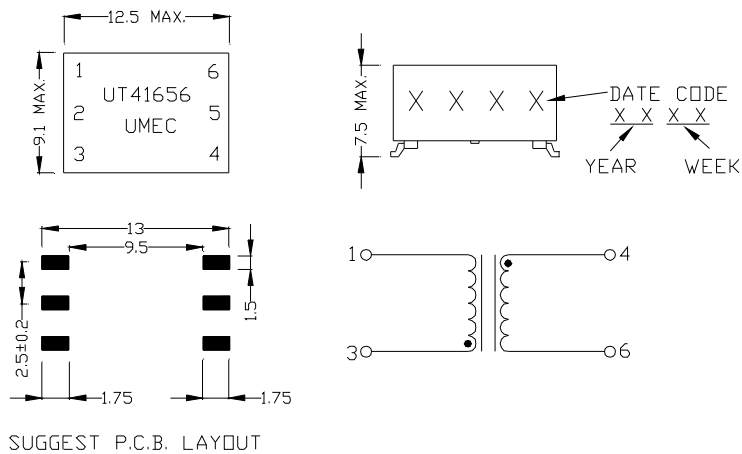


Return Loss



$$\text{Insertion Loss (dB)} = 20 \log(V1/V2)$$

Dimensions & Schematic



NOTE : Packaging information tape and reel
Specifications are subject to change without prior notice.

UNIT : mm

E10-007-C



UNIVERSAL MICROELECTRONICS CO.,LTD.
TEL:886-4-23590096 FAX:886-4-23590129
<http://www.umec-web.com> E-mail:business@umec.com.tw

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,
TAICHUNG,TAIWAN,R.O.C