

# TC8235GIT Ground Loop Isolation Transformer

www.boschsecurity.com



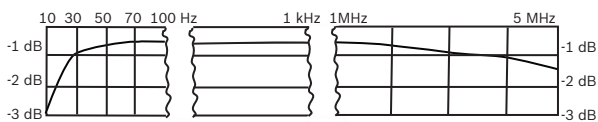
**BOSCH**  
Invented for life



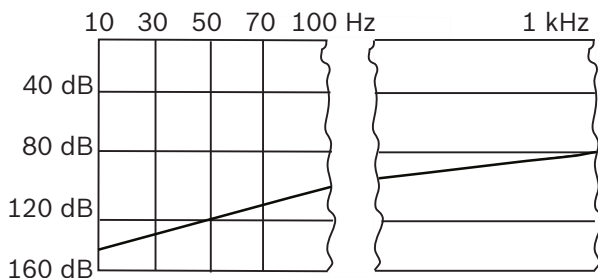
- ▶ Ground isolation for 75 Ohm video/data lines
- ▶ 10 Hz to 7 MHz bandwidth
- ▶ Low insertion loss
- ▶ Insulated BNC connectors
- ▶ Excellent discrimination against power line inter-ground potentials

The TC8235GIT is a one-to-one isolation transformer for 75 Ohm coax video/data lines. These units are designed to eliminate the effects of power line and spurious noise potentials between ground points on transmitted signals.

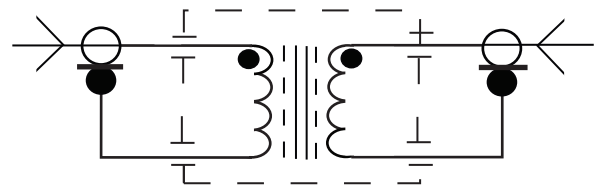
## Installation/configuration notes



## Signal Transmission

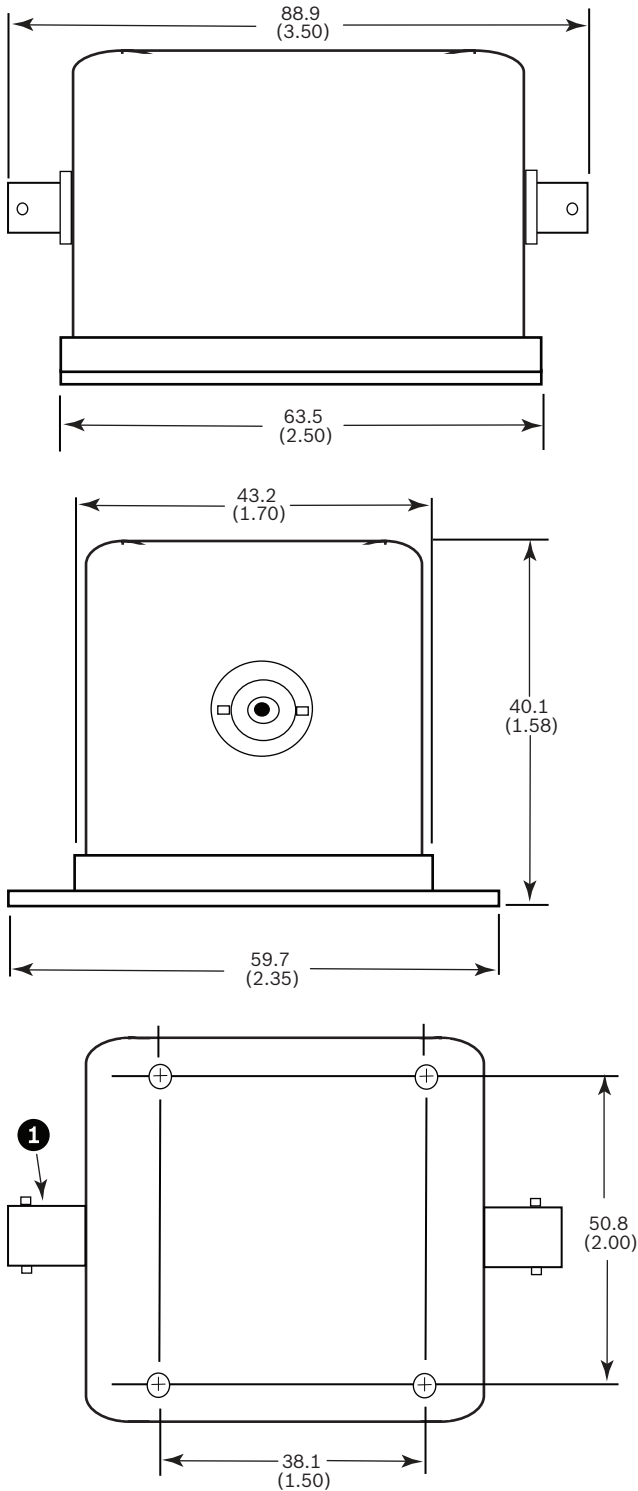


## Ground Isolation



## Circuit Diagram of Transformer

Input 75  $\Omega$  UNB  
Output 75  $\Omega$  UNB



Dimensional Outline in mm (inches)

- 1 Insulated BNC Connector (2)

**Technical specifications**

**Electrical**

Impedance Levels	75 $\Omega$ unbalanced, input and output
Insertion Loss	0.5 dB at 1 kHz
Return Loss	Better than 20 dB, 120 Hz to 5 MHz

**Sine Wave Transmission(Bandwidth)**

Amplitude	Flat loss is 0.45 dB maximum at 15 kHz, 3 dB down relative mid-frequency response at 10 Hz and 7 MHz
Phase	Linear with slope of 18 MHz, 1 MHz to 5 MHz
Ground Isolation	$E_n/E_o = 115$ dB at 60 Hz (decreases with frequency at 6 dB/octave to 30 dB minimum at 1 MHz)

**Dielectric Withstanding Voltage**

500 Vrms, 60 Hz (from connectors to case and each other)

**Mechanical**

Weight	223 g (0.5 lb)
Finish	Black

**Ordering information**

**TC8235GIT Ground Loop Isolation Transformer**  
Order number **TC8235GIT**

**Represented by:**

**Americas:**

Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
security.sales@us.bosch.com  
www.boschsecurity.us

**Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5617 BA Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

**Asia-Pacific:**

Robert Bosch (SEA) Pte Ltd, Security  
Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

**China:**

Bosch (Shanghai) Security Systems Ltd.  
201 Building, No. 333 Fuquan Road  
North IBP  
Changning District, Shanghai  
200335 China  
Phone +86 21 22181111  
Fax: +86 21 22182398  
www.boschsecurity.com.cn

**America Latina:**

Robert Bosch Ltda Security Systems Division  
Via Anhanguera, Km 98  
CEP 13065-900  
Campinas, Sao Paulo, Brazil  
Phone: +55 19 2103 2860  
Fax: +55 19 2103 2862  
latam.boschsecurity@bosch.com  
www.boschsecurity.com