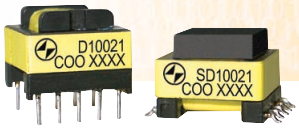


D10021
SD10021

DSL Isolation Transformer

FEATURES

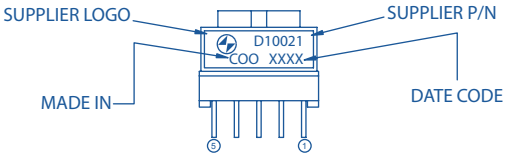
- For top–performance in ADSL modem line interfaces.
- Drop in replacement for EP13.
- Total Harmonic Distortion rated –90dB, typ. between 30kHz–200kHz.
- Insertion Loss rated 0.3dB typ. @ 300kHz.
- Return Loss rated 20.4dB typ. @ 300kHz.
- Longitudinal Balance 69.8dB typ. between 30kHz–1.1 MHz.
- Complies with supplementary insulation for a 250 Vrms primary line circuit according to IEC60950.
- Lower profile (10.9 mm).
- Applicable for IC models:
  AMD: AMDSK134
  GLOBESPAN: EL1501C
  GS–7000

PRODUCT COMPLIANCE

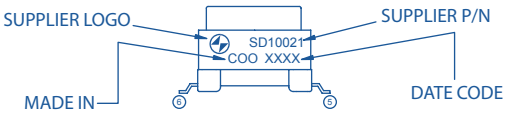
- UL/C– UL recognized file number:
- BABT certificate of recognition:
- Patent Pending

NOMENCLATURE (FIG. 1)

THT



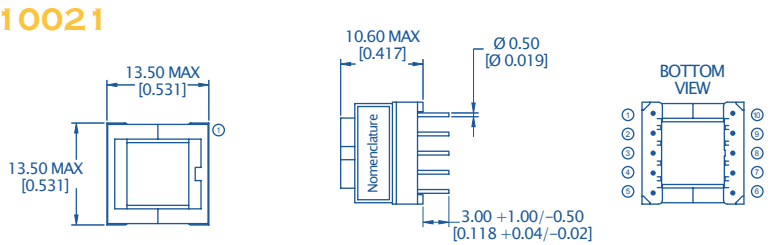
SMT



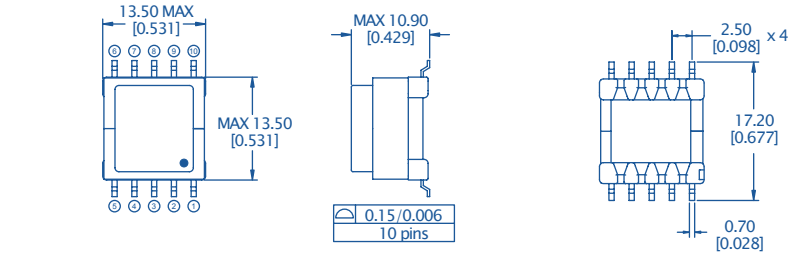
COO= COUNTRY OF ORIGIN

MECHANICAL DIMENSIONS (FIG. 2)

D10021



SD10021



DIMENSIONS: mm / inches

www.sumida.com

North America	Tel. 1 847 545 6700 Fax. 1 847 545 6720
Hong Kong	Tel. 852 2880 6688 Fax. 852 2565 9600
Europe	Tel. 32 89 328850 Fax. 32 11 300890
Singapore	Tel. 65 296 3388 Fax. 65 296 3390
Taiwan	Tel. 886 2 2523 6368 Fax. 886 2 2523 6369
Japan	Tel. 813 3980 2212 Fax. 813 3980 2213

DSL Isolation Transformer

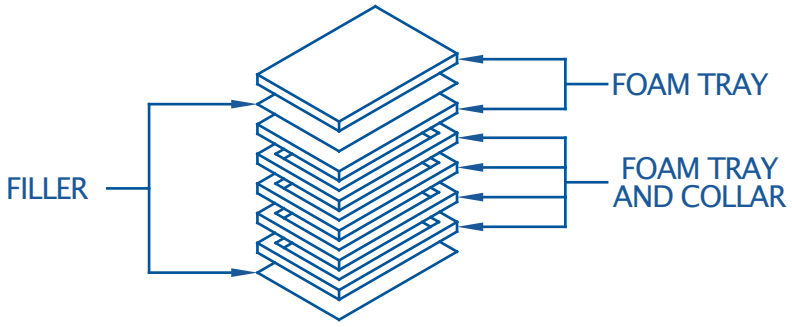
Electrical Performance Specifications

Performance	Conditions	Min	Typ	Max	Units
Impedance	Reflected on Primary with load on Secondary		100 100		Ω
Total Harmonic Distortion	5.3 Vrms, 30kHz–100kHz		–90	–80	dB
Insertion Loss	@ 300 kHz		0.3	0.5	dB
Return Loss	@ 300 kHz	16.5	20.4		dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 min. HiPOT Voltage Duration Trip Leakage Current	1500 1875 2		 200	Vrms Vrms Sec µA
Frequency Response	30 kHz –1.1MHz (Ref. 300kHz)		±1.6	±2.0	dB
Longitudinal Balance	30 kHz –1.1MHz	55	69.8		dB
DC Resistance @ 20°C	Primary winding (R_{pri}) Secondary winding (R_{sec})		2.74 2.71	3.1 3.1	Ω
DC current in Primary			0		mADC
Turns Ratio	Primary to secondary; ±1%		1:1		Turns
Inductance (L_p)	10 kHz, 0.1 VAC	383	407.5	432	µH
Leakage inductance (ΔL_{leak})	100 kHz, 0.1 VAC		3.8	9.0	µH
Core Loss (R_p)	100 kHz, 0.1 VAC		18.6		kΩ
Interwinding Capacitance (C_{ww})	10 kHz, 0.1 VAC		18.96	30	pF
Operating temperature		–40		85	°C
Storage temperature		–40		100	°C

Electrical Performance Specifications (TA = 25°C unless otherwise specified)

- Spice model Schematic is available on the Sumida America Web site in application note AN1002.
- GRAPHS AVAILABLE UPON REQUEST

PACKAGING



PACKAGING

Material	Contents	#Transformers
Tray	Transformer	50

Literature number: D10021 & SD10021