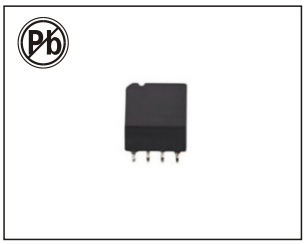
ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

GT70 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

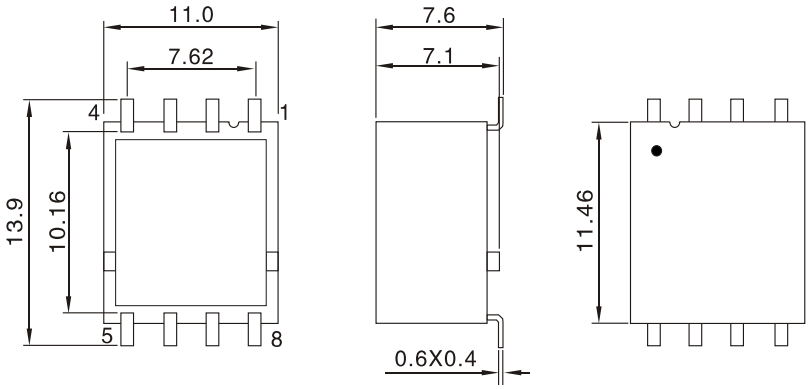
DESCRIPTION:

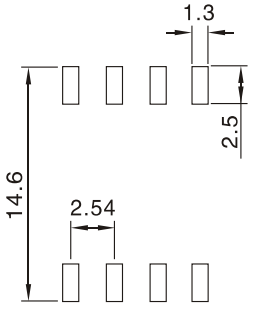
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

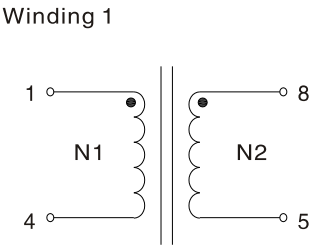
Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
GT7001	1:1:2	100	0.7	1	40	0.5	400	4.0
GT7002	1:1:2	35	0.88	0.4	30	0.1	400	3.0
GT7003	1:1	30	1.4	0.3	25	0.2	250	5.5
GT7004	1:1	15	2.5	0.9	50	0.3	250	3.0
GT7005	2:1	30	1.4	0.5	50	0.12	400	3.0
GT7006	1.68:1	50	0.43	6	17	0.17	100	1.5
GT7007	1:1:2	100	0.7	1	40	0.5	400	3.0
GT7008	1:4:4	30	1.56	1	25	0.15	400	3.0

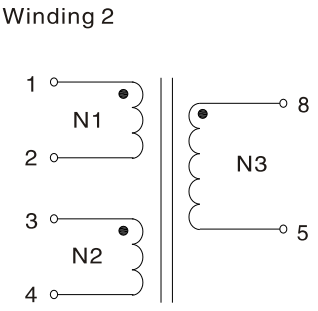
PHYSICAL CHARACTERISTICS



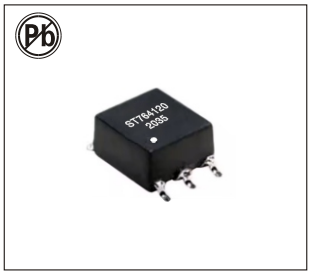


TECHNICAL INFORMATION:





PUSH–PULL ISOLATION TRANSFORMER
ST764 SERIES



Features

- Low profile and small size
- Designed to comply with IEC 62368
- RoHS compliant

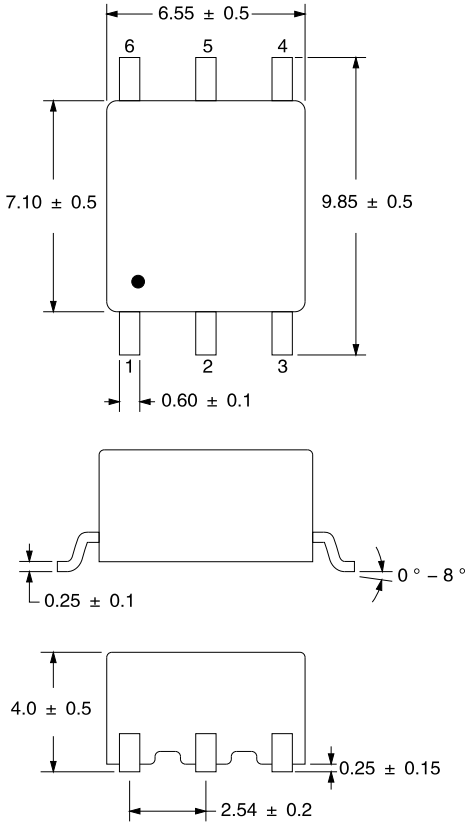
Applications

- Isolated RS–485/RS–232 power supplies
- Industrial automation
- AC motor drives
- Smart metering
- Solar inverters

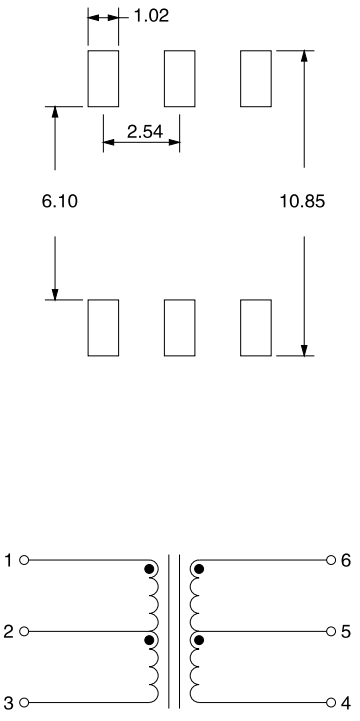
ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Primary Inductance @100 kHz / 0.1 V ± 10%(uH)	Turns Ratio	Volt Microseconds Max. V–uS	DCR Max. (m Ω)	DCR Max. (m Ω)	Isolation Voltage (Volts RMS)
	(1–3)	(1–3) : (6–4)	(1–3)	(1–3)	(6–4)	(1–3) : (6–4)
ST764117	475	1:1.7	11	650	900	3100
ST764120	475	1:2	11	650	1000	3100
ST764111	475	1:1.1	11	650	700	3100
ST764113	475	1:1.3	11	650	800	3100

PHYSICAL CHARACTERISTICS:(mm)

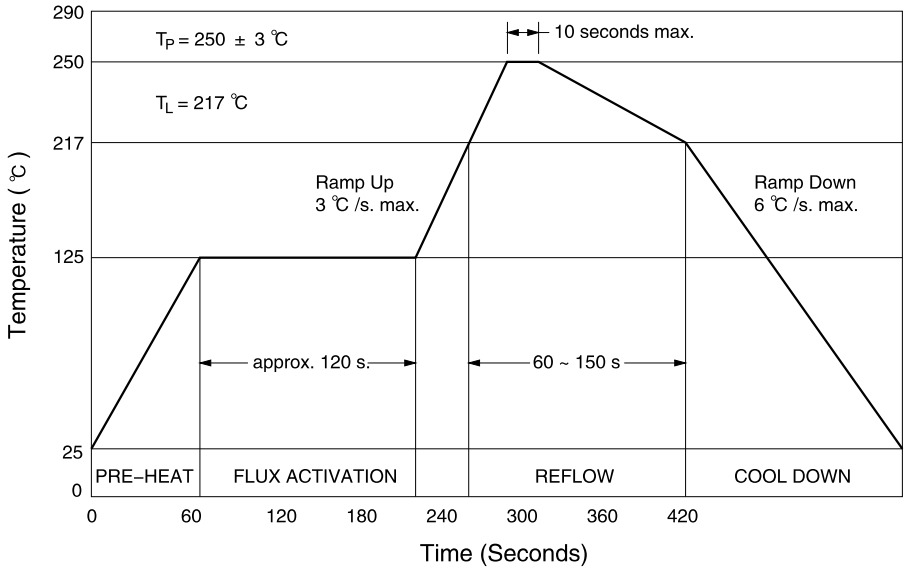


LAYOUT:



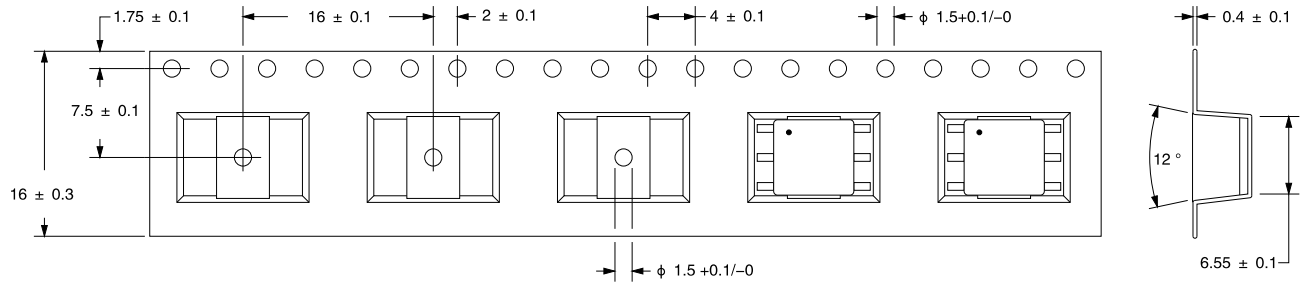
Operating Temperature .....–40 ℃ to +125 ℃
Storage Temperature (with packaging) .....–10 ℃ to +40 ℃
Storage Temperature (without packaging) .....–40 ℃ to +125 ℃
Current Rating .....350 mArms
HI–POT Pri / Sec .....3100 VAC / 1 mA / 2 s
Level of Insulation.....Functional insulation for a working voltage of 400 Vrms per IEC 62368

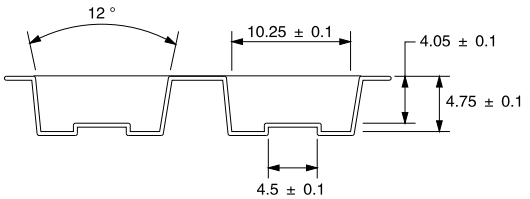
SOLDERING PROFILE:

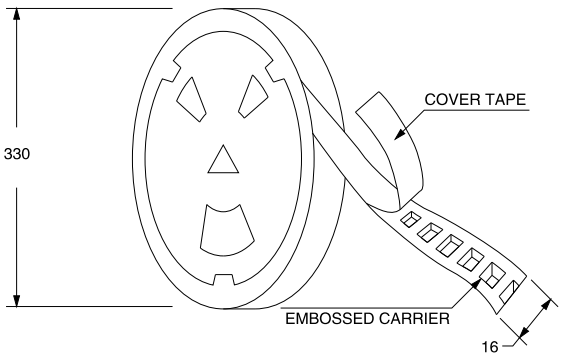


Time within 5 ℃ of actual Peak Temperature (t_P) .....20 ~ 40 s.
T_S min. .....150 ℃
T_S max. .....200 ℃
T_S min. to T_S max.....60 ~ 180 s.
25 ℃ to Peak Temperature .....8 minutes max.

PACKAGING SPECIFICATIONS:(mm)







800 pcs. per 13–inch reel

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4021 Series

FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

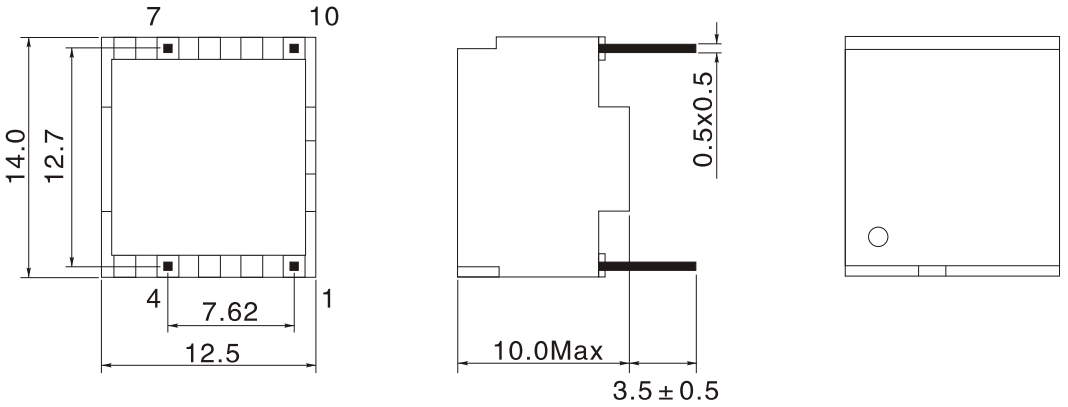
DESCRIPTION:

For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

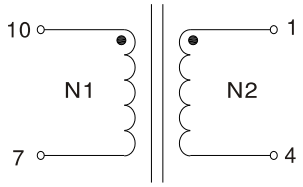
STANDARD SPECIFICATION:

Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4021-142	1.68:1	50	0.43	6	17	0.17	100	1.5
T4021-144	1.37:1	120	0.43	1	35	0.22	450	5.1
T4021-145	1.7:1	130	0.34	1	30	0.2	450	5.1
T4021-146	1:1	100	0.68	1	35	0.26	450	5.1

PHYSICAL CHARACTERISTICS



TECHNICAL INFORMATION:

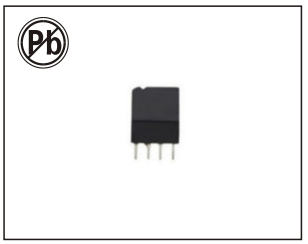


Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4031 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

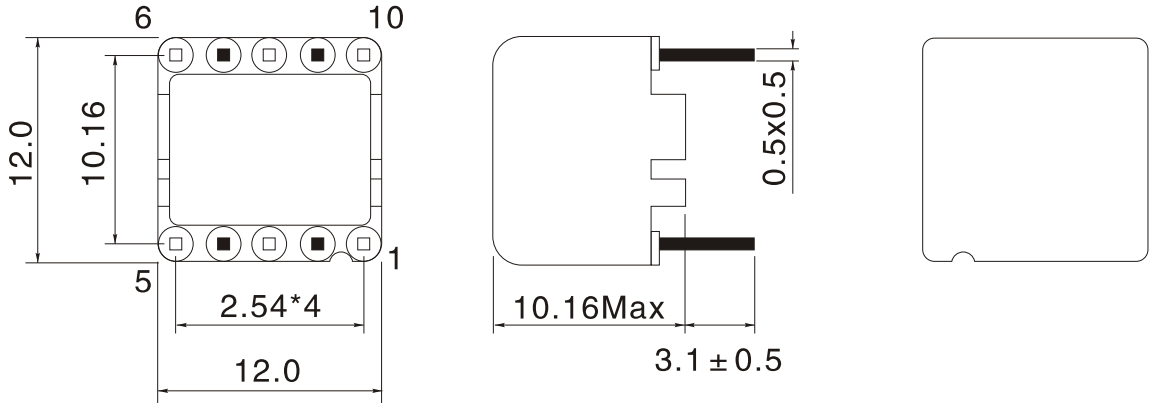
DESCRIPTION:

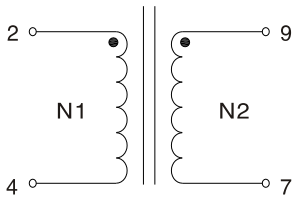
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4031-009	2:1	5	1.0	0.17	17	0.08	300	4.2

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



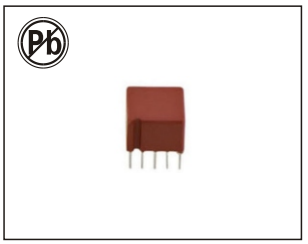


Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4081 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

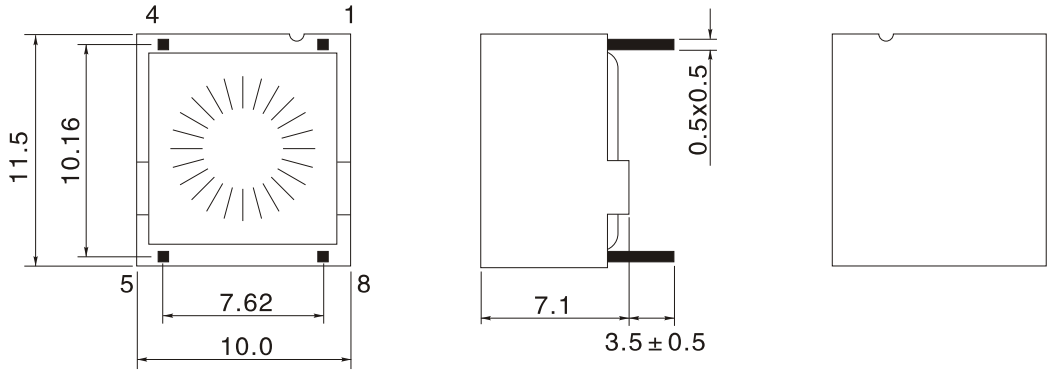
DESCRIPTION:

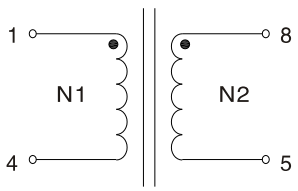
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4081-004	1:1	30	1.4	0.8	25	0.2	400	4.0
T4081-007	2:1	35	0.9	0.3	25	0.11	250	5.5
T4081-008	1.36:1	32	1.2	0.4	25	0.13	250	5.5

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



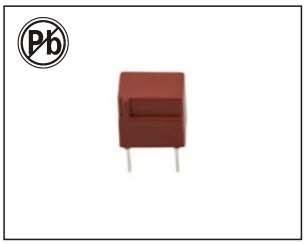


Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4085 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

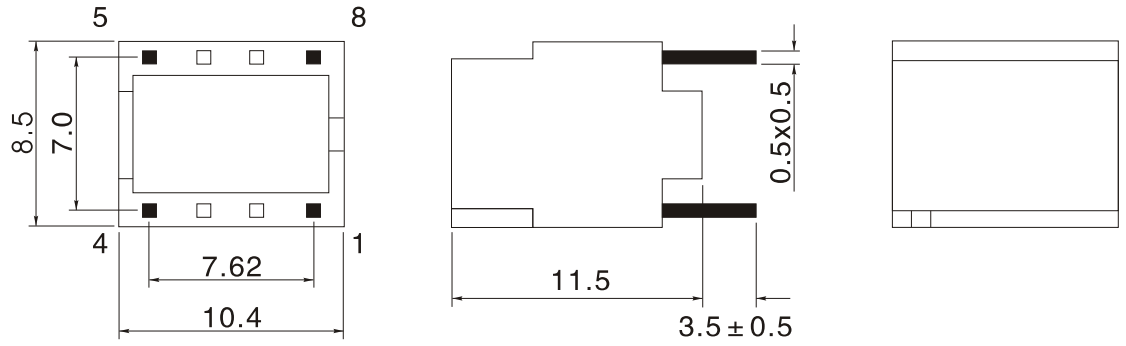
DESCRIPTION:

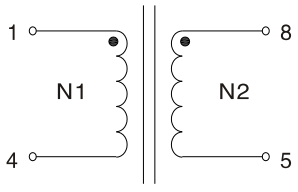
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4085-004	1:1	30	1.4	0.8	25	0.2	300	4.0

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



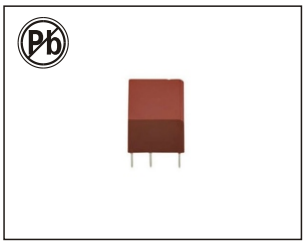


Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4096 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

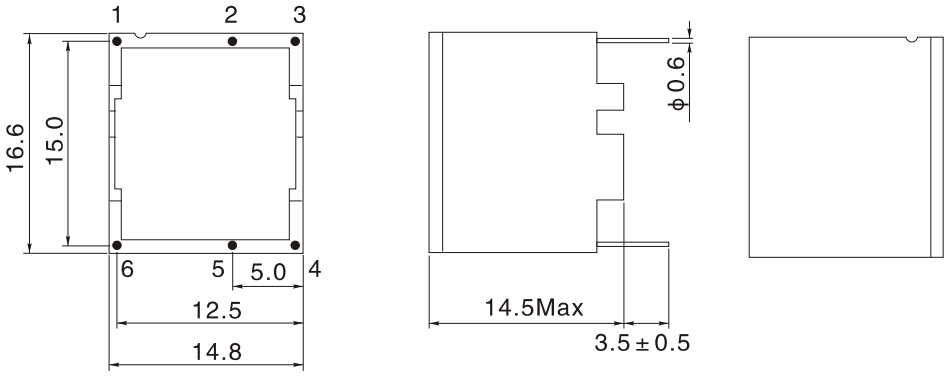
DESCRIPTION:

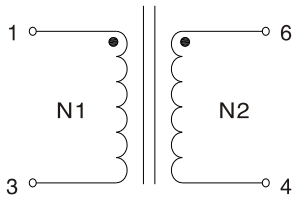
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4096-046	1:1	30	1.3	1	12	0.15	500	6.0
T4096-047	1:1	/	1.3	10	5	0.2	500	6.0

PHYSICAL CHARACTERISTICS





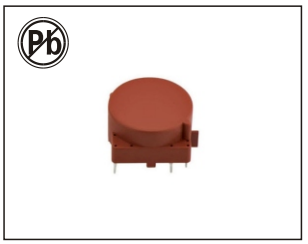
TECHNICAL INFORMATION:

Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4185 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

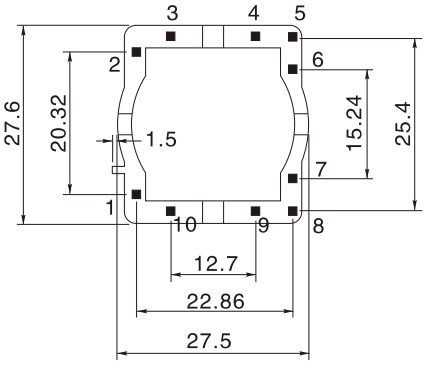
DESCRIPTION:

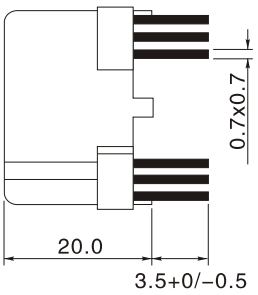
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

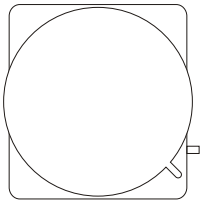
STANDARD SPECIFICATION:

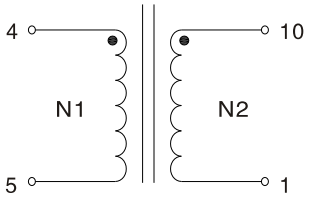
Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4185-047	1:1	50	1.4	0.8	15	0.2	400	10.0

PHYSICAL CHARACTERISTICS









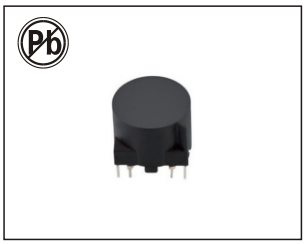
TECHNICAL INFORMATION:

Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T4614 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

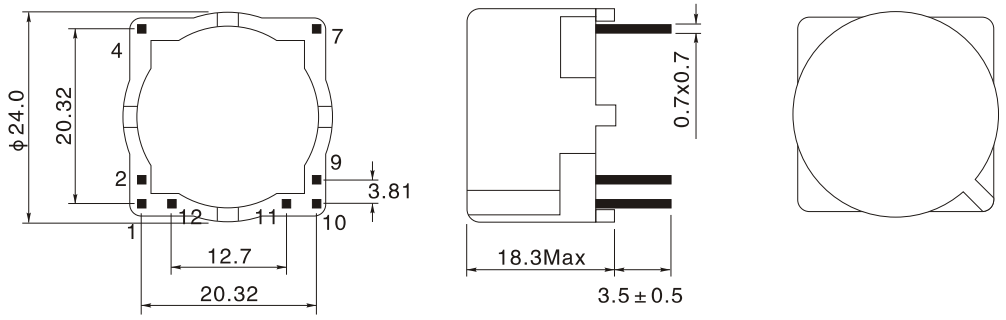
DESCRIPTION:

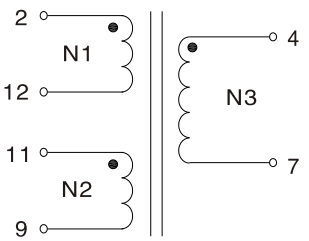
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi-Pot (kV)
T4614-010	1:1.2	250	0.44	0.9	60	0.02	450	5.1

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



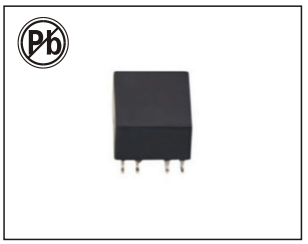


Notes:
Electrical specification at 25℃
Testing:LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)
RDC: QuadTech 1880 Milliohmmeter
Operating temperature rang: -40℃ to +125℃
Storage temperature rang: -40℃ to +125℃

Note:All specifications subject to change without notice.

ISOLATION TRANSFORMERS FOR NARROWBAND PLC SYSTEMS

T5032 Series



FEATURES:

- Excellent transmission characteristics
- High mains current capability, low THD
- Matching with all leading IC (modulation methods FSK, DCSK and OFDM)
- Compliant with all PLC standards (HomePlug, CENELEC ...)
- Compact designs in THT and SMT housings
- Insulation according to IEC 60950, UL 1950 and IEC 61558

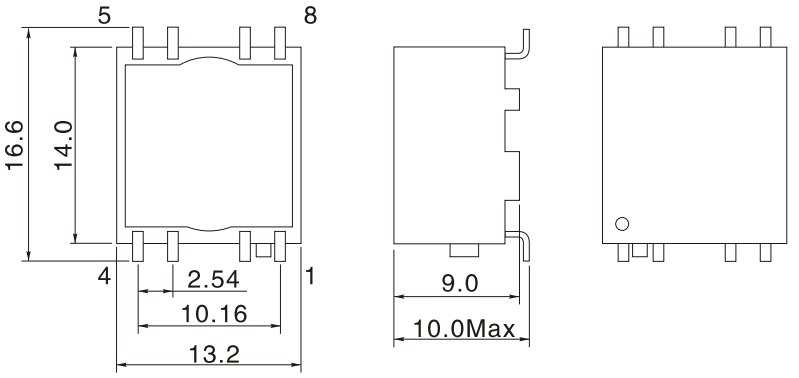
DESCRIPTION:

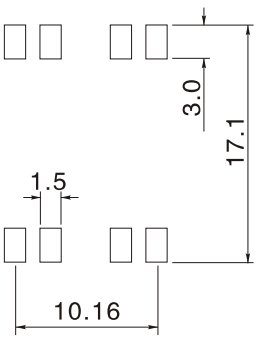
For narrowband PLC systems where the operating frequency may be up to 500 kHz isolation transformers based on amorphous or nanocrystalline offer excellent transmission characteristics, high robustness against EMC interferences and safe galvanic insulation.

STANDARD SPECIFICATION:

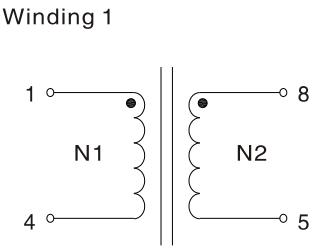
Part Number	Turns ratio	Sec. current (mA)Max	Sec. Inductance (mH)Min	Sec. Leakage inductance (Short Pri.) (uH)	Capacitance Pri to Sec (pF)Typ.	Sec. DCR (Ω)Typ.	Insulation voltage Pri. to Sec. (V)	Hi–Pot (kV)
T5032–104	1:1	90	0.5	6.6	15	0.09	100	1.0
T5032–111	2:1	130	0.3	5.8	7	0.17	300	3.0
T5032–102	1:1:2	100	0.7	1	30	0.23	450	5.1
T5032–114	1:1.15:1.62	120	0.54	1	30	0.22	450	5.1

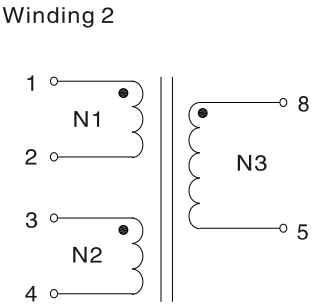
PHYSICAL CHARACTERISTICS





TECHNICAL INFORMATION:





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