



Transformator I2PLCTR-5 Datasheet

chargebyte GmbH

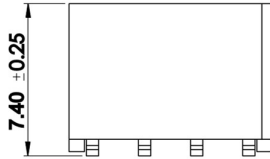
Sep 18, 2023

1:1:1 PLC Transformer

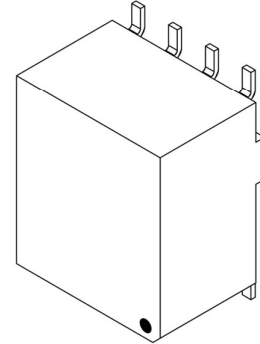
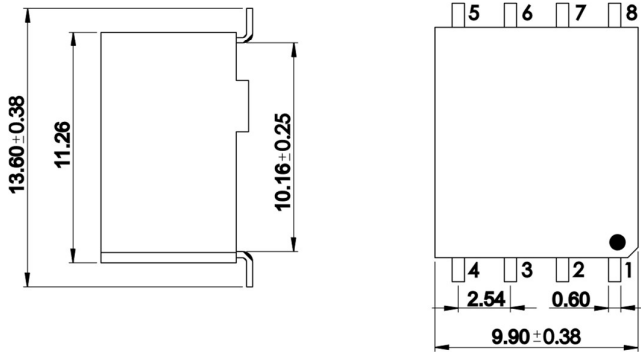
S23100085

MPN: I2PLCTR-5

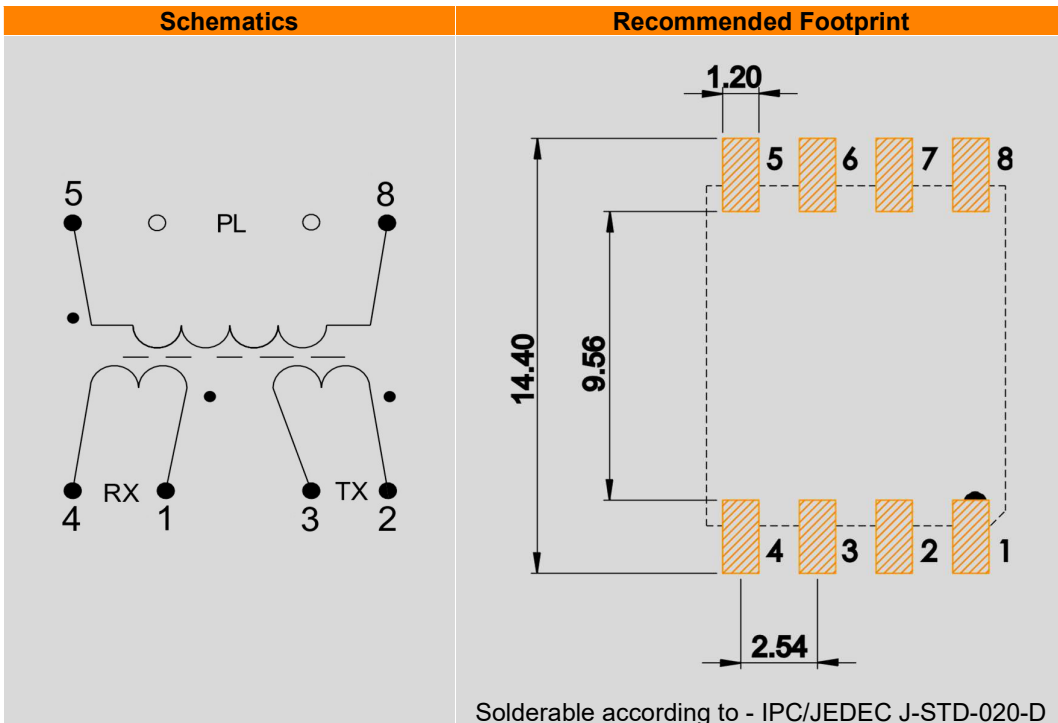
view from front side



view from top side



Units: [mm]



Electrical Properties:

Winding No.:	L _{nom}		f _{meas}	Frequency		DC resistance
	[μH]	±%	[MHz]	range [MHz]	max att. [dB]	max [mOhm]
Pin(2-3), 100mV	20	30	2	2 - 30	-3	120
Pin(1-4), 100mV	20	30	2			120
Pin(5-8), 100mV	20	30	2			120
Operating Temperature: -40°C ±125°C Max. Soldering temperature: 20 to 30sec at 260°C						
Dielectric withstand voltage		TX & RX to PL = 4.5 kV _{rms} for 60 s				

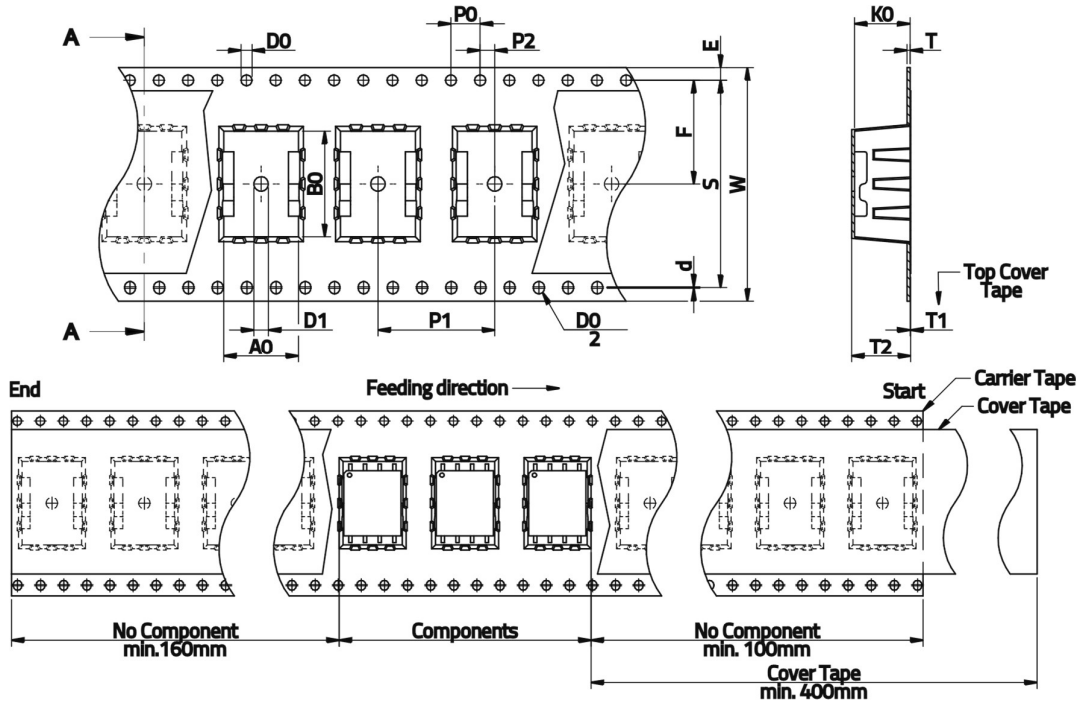
Moisture Sensitivity Level (MSL): 1

RoHS Approval: Compliant

REACH Approval: Conform

Test Equipment: Agilent E4980A

Packaging Specification - Tape:

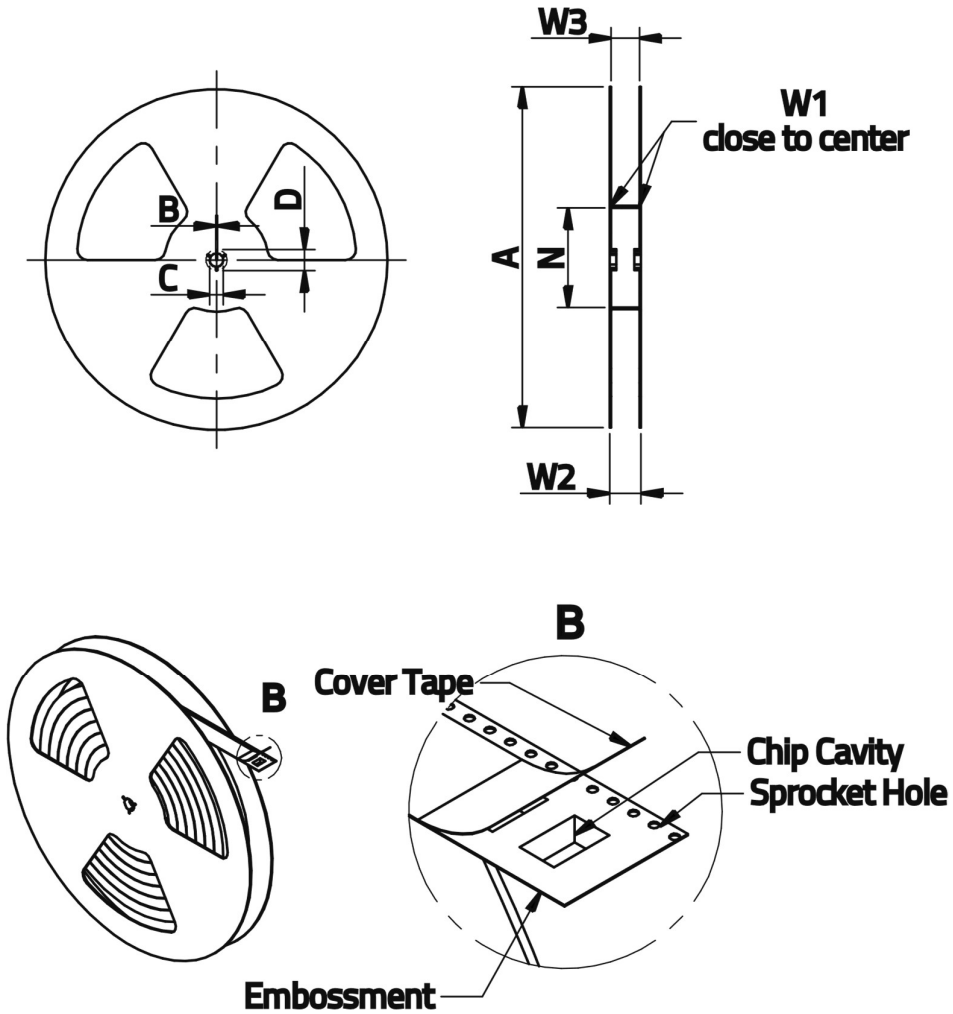


Units: [mm]

	Tape Type	A0	B0	W	T	T1	T2	K0
Tolerance		±0.15	±0.15	±0.30	±0.05	ref.	±0.15	±0.15
Value	2a	10.26	14.46	32.00	0.50	0.10	8.50	8.00

P0	P1	P2	D0	D1	d	E	S	F
±0.1	±0.1	±0.1	±0.1/-0.0	min.	±0.05	±0.1	min.	±0.1
4.00	16.00	2.00	1.50	2.00	0.20	1.75	28.40	14.20

Packaging Specification - Reel:



Units: [mm]

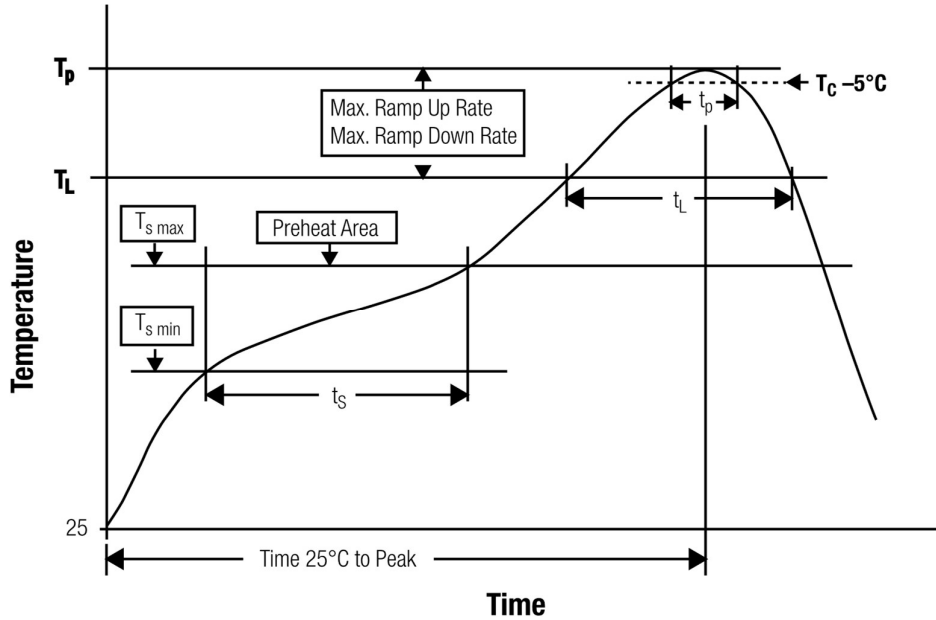
	A	B	C	D	N	W1	W2	W3	W3
Tolerance	±2.00	min.	min.	min.	min.	±2.0	max.	min.	max
Value	33.00	1.50	12.80	20.20	80.00	32.40	38.40	31.90	35.40

Storage and transport conditions (in blister belt): < 40 °C

≤ 75% relative humidity, store or transport in the dark.

PU: 500 Piece per roll

Classification Reflow Profile for SMT components:



Profile Feature		Value
Preheat Temperature Min.	$T_{s \text{ min}}$	150°C
Preheat Temperature Max	$T_{s \text{ max}}$	200°C
Preheat Time T_s from $T_{s \text{ min}}$ to $T_{s \text{ max}}$	t_s	60 - 120 seconds
Ramp-up Rate (T_L to T_p)		3°C/second max.
Liquidous Temperature	T_L	217°C
Time t_L maintained above T_L	t_L	60 - 150 seconds
Time within 5°C of actual peak	t_p	20 - 30 seconds
Ramp-down Rate (T_p to T_L)		6°C/second max.
Time 25°C to peak temperature	T_P	8 minutes max.
IPC/JEDEC		J-STD-020E