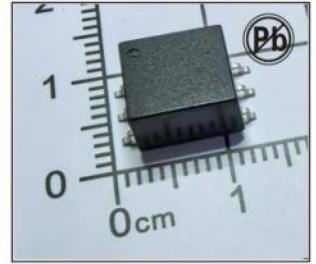


DC-DC ISOLATION TRANSFORMER

GT5030-2W Series

FEATURES:

- Wide operating temperature range: -40 °C to +125 °C
- Isolation voltage 4000VDC
- SMD package
- Industry standard pin
- Toroidal core structure



GT5030-2W series DC-DC isolation transformer is a high-performance ring transformer specially designed for use with various power management chips, which can provide input and output isolation. It can precisely customize the turn ratio for customers to achieve high-precision voltage conversion and isolation.

STANDARD SPECIFICATION@25°C:

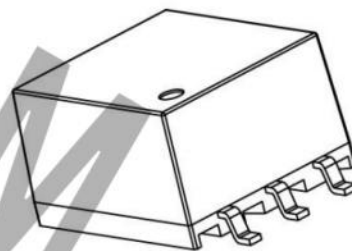
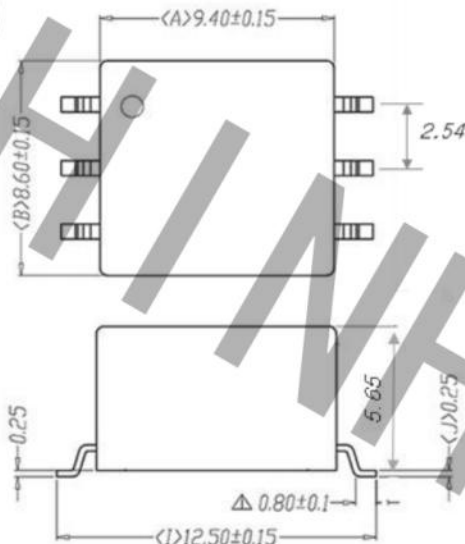
Product model	Turns ratio	Primary Inductance (+/-20%) @1kHz, 1V	Primary D.C. Resistance (Max)	Leakage Inductance (Max) @1kHz, 1V	Interwinding Capacitance (Max) @1kHz, 1V	Peak current (Max)	Potting form	Packaging form
GT5030-2WPT	1:1.1	250μH	0.5Ω	25μH	12pF	400mA	Potting	Tube
GT5030-2WNT	1:1.1	250μH	0.5Ω	25μH	12pF	400mA	Non potting	Tube
GT5030-2WPR	1:1.1	250μH	0.5Ω	25μH	12pF	400mA	Potting	Reel
GT5030-2WNR	1:1.1	250μH	0.5Ω	25μH	12pF	400mA	Non potting	Reel

Potting code: P- Potting, N- Non potting

Packaging form: T- Tube , R- Reel

PHYSICAL CHARACTERISTICS

TECHNICAL INFORMATION:



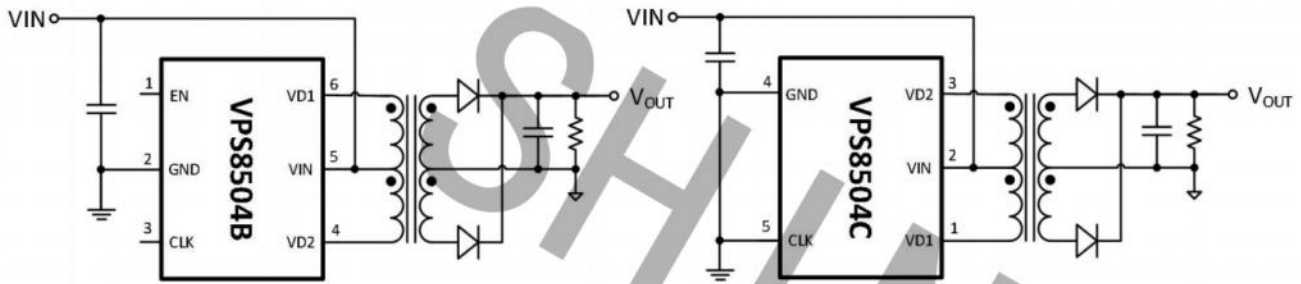
Note:

Dimensions in mm

Terminal diameter tolerance: +/-0.10

Undeclared tolerance: +/-0.50

Circuit Design and Application

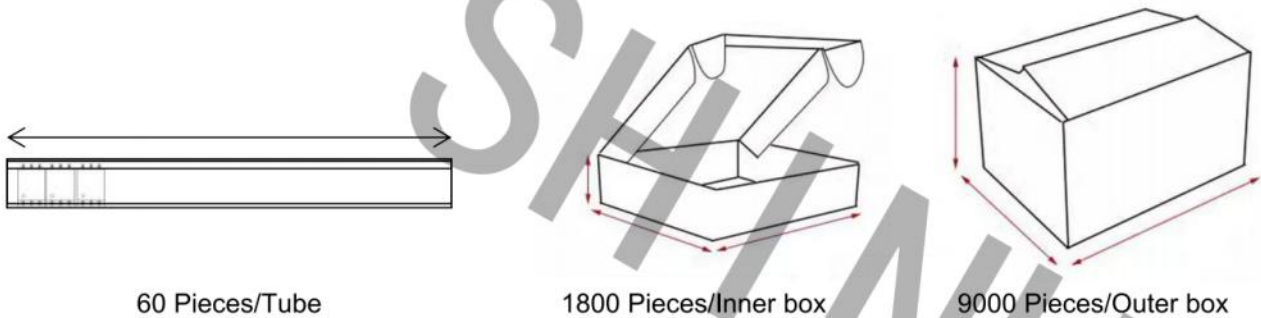


General Characteristics

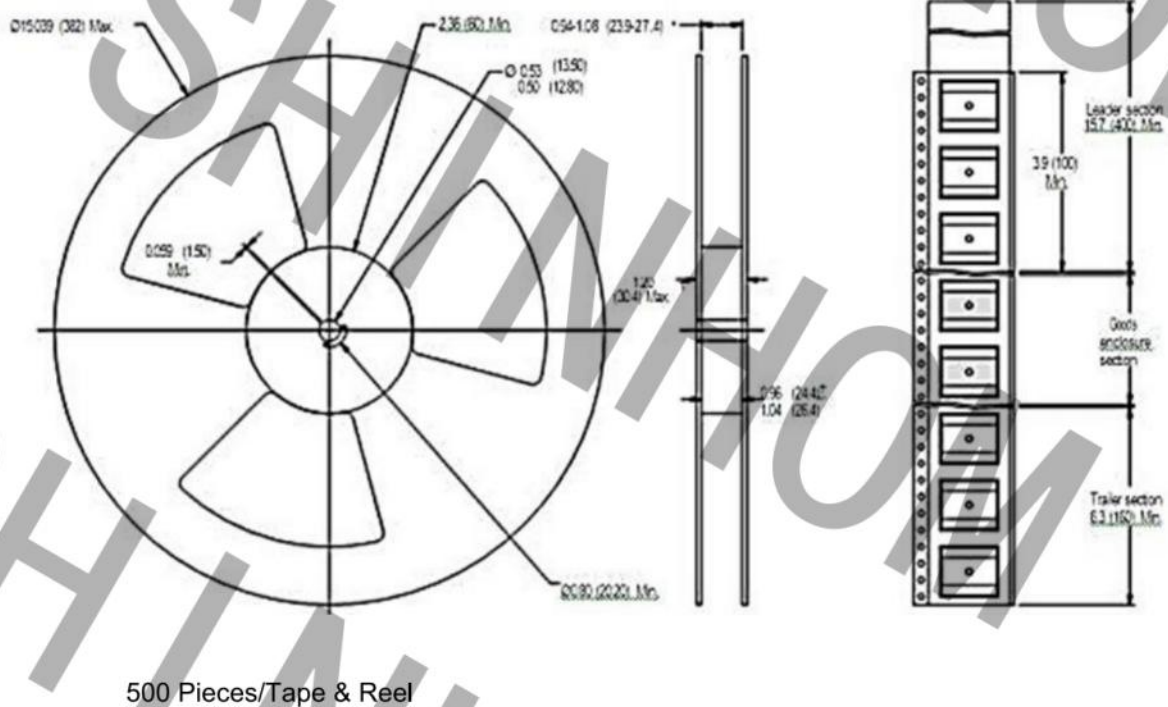
Parameter	Conditions	Min.	Typ.	Max.	Units
Isolation voltage	Input-output, Test time 1 minute, Leakage current less than 1 mA	4000	--	--	VDC
Insulation resistance	Input-output, Insulation voltage 500VDC	1000	--	--	MΩ
Working temperature	Temperature $\geq 85^{\circ}\text{C}$ for derating (See Figure 4)	-40	--	+125	$^{\circ}\text{C}$
Storage temperature		-55	--	+155	$^{\circ}\text{C}$
Storage humidity	Non condensing	--	--	95	%RH
Housing temperature rise during operation	Ta=25 $^{\circ}\text{C}$, Nominal input, Full output	--	15	25	$^{\circ}\text{C}$
Soldering temperature resistance of pins	The distance from the welding spot to the shell is 1.5mm, 10 seconds	--	--	300	$^{\circ}\text{C}$
	REFLOW: Peak temperature Tc $\leq 235^{\circ}\text{C}$, maximum time above 217 $^{\circ}\text{C}$ for 60 seconds.	--	--	235	$^{\circ}\text{C}$
Mean time between failures 【MTBF】	MIL-HDBK-217F@25 $^{\circ}\text{C}$	3500	--	--	kHours
Housing material	Black flame retardant and heat-resistant plastic (UL94V-0)				
Overall dimensions	9.40 x 8.60 x 5.90mm				
Weight	1.0g(Typ.)				
Cooling mode	Natural air cooling				

Packaging Method

Tube



Reel



Notes

1. The operating current shall not exceed the specified range, otherwise permanent and unrecoverable damage may be caused;
2. Unless otherwise specified, the parameters in this manual are measured at 25 °C and 40%~75% humidity ;