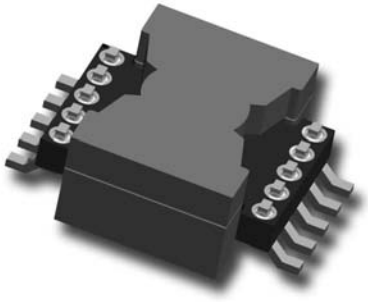
DC-DC NS SERIES

Third generation of planar transformers

Features

-Designed for high-current telecom power supply applications. (LM5041 – UCC3580).
-Designed with the highest efficiencies in the market.
-Designed with the lowest profiles in the market.
-Three new shapes added to our standard family.
-Designed to offer high power densities along with great reliability and repeatability.
-Designed to provide different output ratings to suit a variety of applications. (LM5030).
-Ideal for use in open loop intermediate bus converter (IBC) and closed loop voltage mode converters (LM5033).
-Designed to meet UL60950/EN60950.
-Winding design under our own unique raw material design system.



Electrical specifications

Part Number	Input Voltage Vdc (V)	Output Voltage (V)	Output Current (A)	Power (W)	Frequency (kHz)	Duty cycle	Topology	Inductance	Typ Leakage Inductance (µH)	Turns Ratio (Pri:Sec)	Max Total losses (W)	Recommended PWM Controller
P018PP1CS1	36-72	3,3	30	100	400	0,45	Push Pull	218µH	0,3	9:1	2	LM5030 - NS
P018PP1CS2	36-72	5	7	35	400	0,43	Push Pull	97,2µH	0,3	6:1	0,75	LM5030 - NS
P018PP1CS3	36-72	12	5	60	400	0,45	Push Pull	218µH	0,3	3:1	1,2	LM5030 - NS
P020FW1CS1	36-72	3,3	30	100	300	0,45	Forward	65µH	0,25	6:1	2	UCC3580 - TI
P020PP1CS1	36-72	12	15	180	300	0,45	Push Pull	187,0µH	0,25	10:4	3,6	MAX5069 - Maxim
P020HB1CS1	40-60	10	20	200	300	0,45	Half Bridge	46,8µH	0,1	5:4	4	LM5033 - NS
P020PP1CS2	36-72	2,5	60	150	300	0,45	Push Pull	1,25mH	0,3	8:1	3	LM5041 - NS
P026PP1CS1	36-72	28,5	11	310	150-220	0,48	Push Pull	155,0uH	0,3	1:1	2	LM5035 - NS

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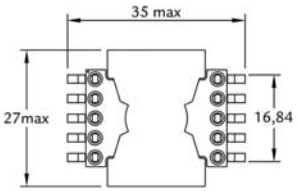
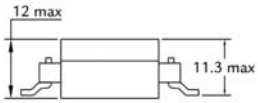
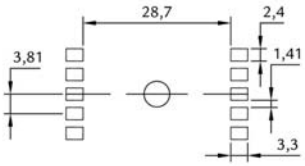
Dimensions

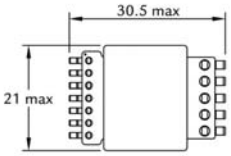


Pø26 NS Series

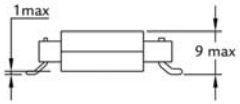


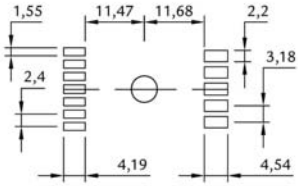


Recommended PCB layout

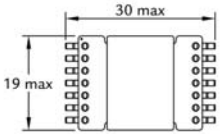


Pø20 NS Series

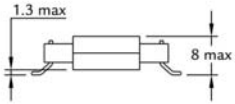


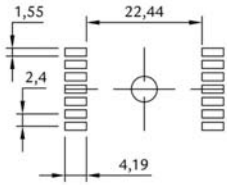


Recommended PCB layout



Pø18 NS Series





Recommended PCB layout

Schematics