

SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER P/N

SK P/N

MPIF1040 Series

EDITION

A0

SPEC.NO.:

SK-MPIF1040

DATE:

2022/11/15

CUSTOMER APPROVE

MADE BY: Anna

CHECKED BY: Jimmy

APPROVED BY: Eric

Please fax back after confirm of signature.

中山市设科电子有限公司
地址：广东省中山市板芙镇里溪大道21号
电话：0760-86500586 手机：13923337660
传真：0760-86500586 E-mail: Eric@skcoil.com

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HIGH CURRENT SMT POWER INDUCTOR.–MPIF Series

Operating temperature range: -40~+125°C (Including self-heating)

Storage environment: temperature -10°C~+40°C , Less than 75% relative and humidity, shelf life for 6 months, beyond 6 months should check the product weldability

1.PART NUMBERING SYSTEM

MPIF	1040	—	XXX	—	X
1	2		3		4

1.SERIES NAME

2.DIMENSIONS

3.INDUCTANCE

4.TOLERANCE CODE: J:±5% K:±10% L:±15% M:±20% P:±25% N:±30%

2.FEATURES:

Low profile and low DCR.

Shielded construction.

Handles high transient current spikes without saturation

Frequency up to 3MHz

Ultra Low buzz noise, due to composite construction

3.APPLICATIONS

PDA/Notebook/Desktop, and server applications

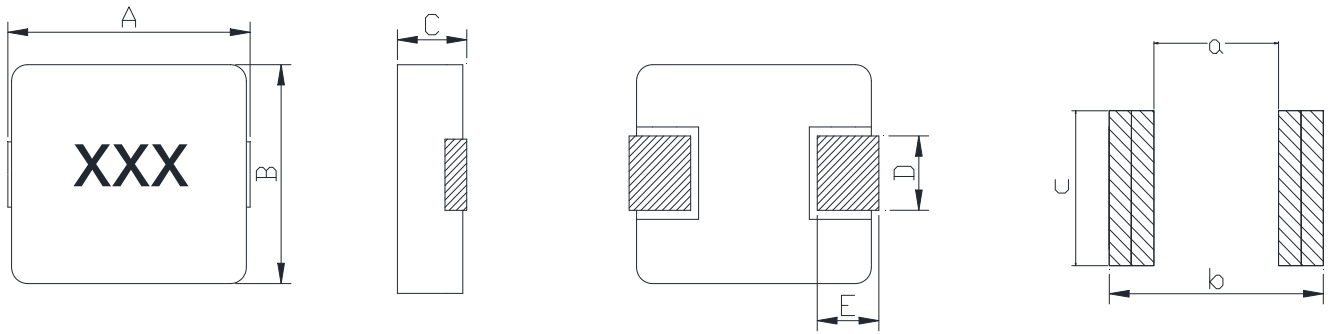
DC/DC converters in distributed power systems

DC/DC converter for Field Programmable Gate Array(FPGA)

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4. Appearance shape (unit : mm)



5. Appearance size(unit : mm) Tolerance:

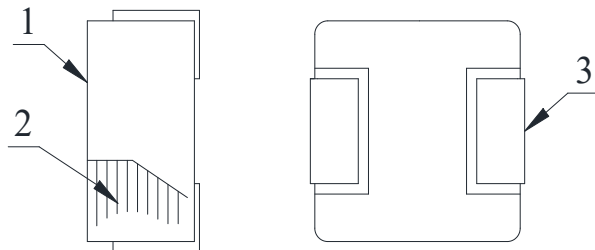
A	B	C	D	E	a	b	c
11.50	10.00	4.00	3.00	2.00	5.40	13.60	4.10
MAX	±0.30	MAX	±0.50	±0.50	TYP	TYP	TYP

6. Test instruments

L tested by Wayne kerr 3260B LCR meter with Wayne kerr 3265B bias current source.

DCR tested by Milli-ohm meter.

7.MATERIAL LIST



No	Part	Material	Temperature class
1	CORE	Alloy powder	/
2	WIRE	Copper wire	200°C
3	BASE	Tinned copper	/

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8. CHARACTERISTICS

P/N	Inductance 电感 @100KHz/1.0V	DC Resistance 直流电阻 MAX(TYP)	Saturation Current 饱和电流	Heat Rating Current 温升电流	Marking 印字
Units	uH	mΩ	A	A	黑色
Symbol	L	DCR	Isat	Irms	
MPIF1040-R15M-LF	0.15±20%	0.80(0.60)	60.00	45.00	R15
MPIF1040-R22M-LF	0.22±20%	1.00(0.75)	50.00	38.00	R22
MPIF1040-R33M-LF	0.33±20%	1.20(1.05)	50.00	30.00	R33
MPIF1040-R36M-LF	0.36±20%	1.20(1.05)	50.00	30.00	R36
MPIF1040-R47M-LF	0.47±20%	1.70(1.50)	40.00	30.00	R47
MPIF1040-R56M-LF	0.56±20%	1.80(1.60)	33.00	25.00	R56
MPIF1040-R68M-LF	0.68±20%	2.40(2.10)	30.00	23.00	R68
MPIF1040-R82M-LF	0.82±20%	3.00(2.60)	28.00	21.00	R82
MPIF1040-1R0M-LF	1.00±20%	3.20(2.60)	28.00	21.00	1R0
MPIF1040-1R5M-LF	1.50±20%	4.20(3.80)	22.00	16.00	1R5
MPIF1040-2R2M-LF	2.20±20%	7.00(6.00)	18.00	12.00	2R2
MPIF1040-3R3M-LF	3.30±20%	11.80(10.0)	16.00	11.00	3R3
MPIF1040-4R7M-LF	4.70±20%	20.0(17.0)	15.00	9.00	4R7
MPIF1040-6R8M-LF	6.80±20%	25.0(22.0)	12.00	8.50	6R8
MPIF1040-8R2M-LF	8.20±20%	30.0(26.0)	9.00	8.00	8R2
MPIF1040-100M-LF	10.0±20%	30.0(26.0)	8.50	7.50	100
MPIF1040-150M-LF	15.0±20%	45.0(40.0)	7.00	6.50	150
MPIF1040-220M-LF	22.0±20%	66.0(58.0)	5.50	5.00	220
MPIF1040-330M-LF	33.0±20%	92.0(85.0)	5.00	4.40	330
MPIF1040-470M-LF	47.0±20%	145(130)	3.50	3.30	470
MPIF1040-680M-LF	68.0±20%	205(190)	3.00	2.50	680
MPIF1040-101M-LF	100±20%	350(315)	2.30	2.20	101

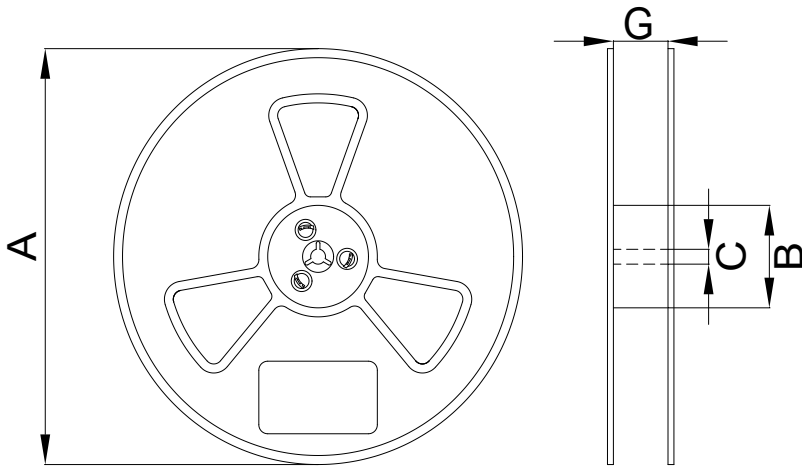
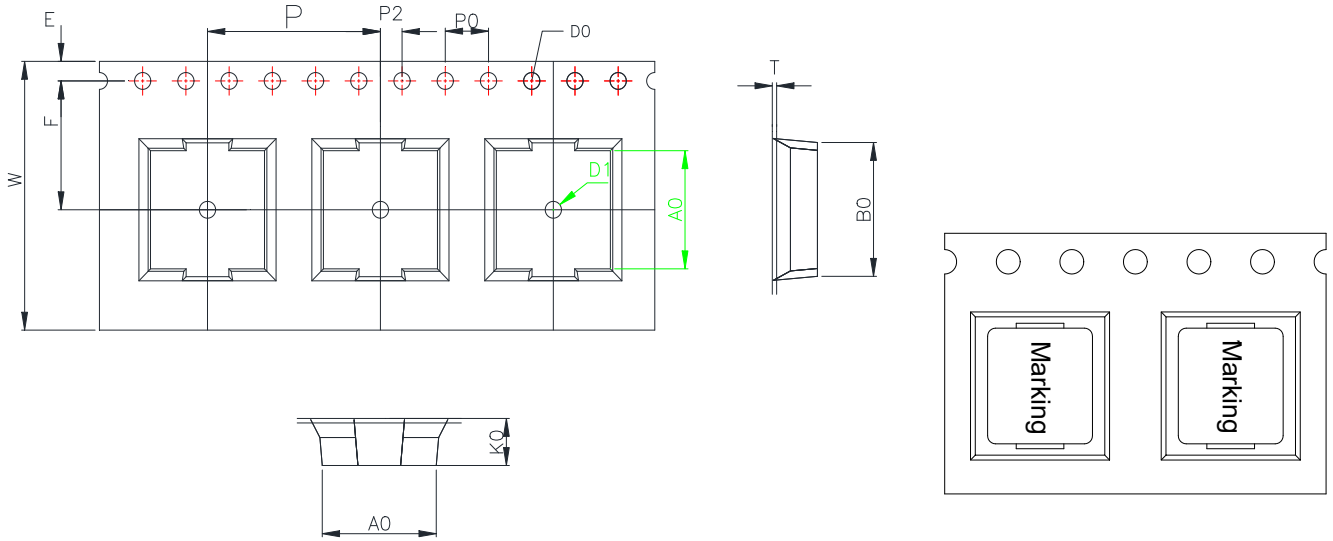
- ※1: All test data is referenced to 25° C ambient;
- ※2: Rated current: Isat or Irms, whichever is smaller;
- ※*3: Isat: DC current at which the inductance drops approximate 30% TYP from its value without current;
- ※*4: Irms: DC current that causes the temperature rise (ΔT =40° C) from 25° C ambient.
- ※*5: Absolute maximum voltage 30VDC。

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10.DIMENSIONS FOR CARRIER TAPES (unit:mm)

ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	24.00 ±0.3	10.70 typ	12.0 typ	4.50 typ	16.00 ±0.1	11.50 ±0.1	1.75 ±0.1	1.50 ±0.1	0.00 ±0.0	4.00 ±0.1	2.00 ±0.1	0.35 typ



REEL SPEC	13"
A±1.0	330.0
B±1.0	100.0
C±0.50	13.2
G±0.20	24.5

2.PACKING(mm)

载带宽度 (W)	间距 (P)	卷(PCS) 13inch	2卷/内箱 (PCS)	3内箱/外箱 (PCS)
24	16	500	1000	3000

备注:

1. 包装袋规格: 375*400mm (REF.) .
2. 内箱规格: 355*340*90mm (REF.) .
3. 外箱规格: 370*365*285mm (REF.) .