

SPECIFICATION FOR APPROVAL

CUSTOMER: 明泰

DESCRIPTION: Power Transformer

CUSTOMER PART NO.:

UMEC MODEL NO.: UT38A31S

ORDERING CODE(MPN): TG-UT38A31S

UMEC ISSUE NO.: USTA-109132

DATE: DEC./15/2020

Made in Taiwan (DATE CODE YYWWG)
China (DATE CODE YYWWCG)
Vietnam (DATE CODE YYWWVG)



APPROVED BY:

THIS SPECIFICATON IS:

☐ FULLY APPROVED

☐ DENIED

☐ APPROVED UNDER THE FOLLOWING CONDITIONS

SIGNATURE: _____ DATE: _____

NAME(PRINTED): _____

TITLE: _____



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Materials List :

NO.	Item	Material Description	Temp. (Flame) Class	Vender	UL File NO.
1	CORE	Mn-Zn FERRITES., EFD15	—	ACME OR EQUIV.	—
2	BOBBIN	PHENILIC, PM-9630	V-0	SUMITOMO BAKELITE CO., LTD. OR EQUIV.	E41429
3	WIRE	POLYURETHANE, SFHW@ (All Color)	180°C	JUNG SHING WIRE CO., LTD. OR EQUIV.	E174837
4	TAPE	POLYIMIDE FILM TAPE FK-01%	180°C	CHANGSHU FUBANG ADHESIVE TAPE LTD CO OR EQUIV.	E248834
5	CLAMP	STAINLESS STEEL	—	JINSHENG ENTERPRISE CO., LTD. or EQUIV.	—
6	EPOXY	S-9001A	V-0	SHAW HUOW CO., LTD. OR EQUIV.	E105888
7	VARNISH	BC-359	130°C	JOHN C DOLPH CO., LTD. OR EQUIV.	E317427
8	SOLDER	Sn/Ag/Cu			

APPROVED BY	Andy Tseng	CHECKED BY	M.T.TSAI	DRAWN BY	Mengju
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Electrical specifications at 25°C : 1.) Turns Ratio and Polarity : 1 : 0.25 $\pm$ 3% at 15.75kHz 1V , PIN(5-3):(6,7-9,10) . : 1 : 0.25 $\pm$ 3% at 15.75kHz 1V , PIN(5-3):(2-1) . 2.) Inductance : 90uH $\pm$ 10% . , PIN(5-3), 100kHz, 0.1V . : 80uH min. , PIN(5-3), 100kHz, 0.1V, 1.7A . 3.) Leakage Inductance : 1.0uH max. at 100kHz 0.1V , PIN(5-3) with PIN(1-2 & 6-7-9-10) shorted . 4.) D.C.R. : 300m Ω . max. , PIN(5-3) . : 35m Ω . max. , PIN(6-10) . : 35m Ω . max. , PIN(7-9) . : 110m Ω . max. , PIN(2-1) . 5.) HI-POT Test : 1500Vrms 0.5mA 2s , PIN(1-2-3-5) to PIN(6-7-9-10) . : 500Vrms 0.5mA 2s , PIN(5-3) to PIN(2-1) . 6.) Operating Temperature : -40 to +125°C .				
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Schematic diagram & Dimensions: (UNIT :mm) Tolerances : +/-0.2mm

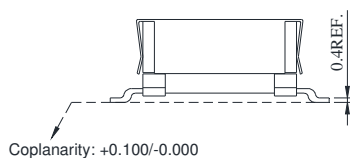
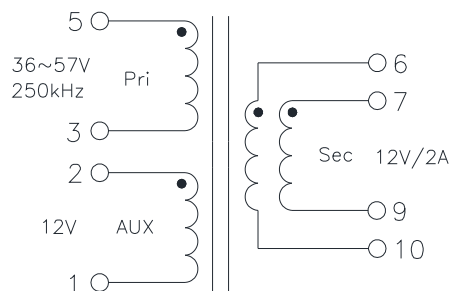
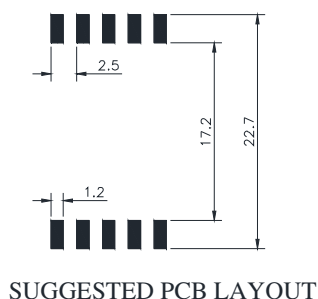
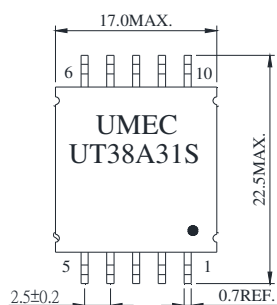
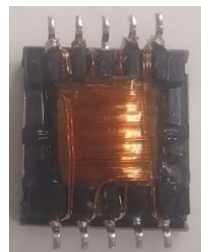
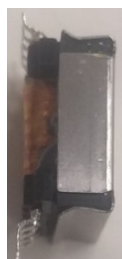


Photo:



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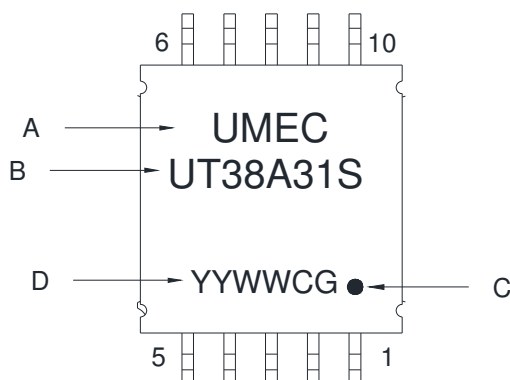
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Marking Information :



Notes:

- A. Logo : UMEC
- B. UM MODEL NO. : UT38A31S
- C. ● : Dot (PIN1)
- D. DATE CODE & RoHs Compliant : YYWWCG or YYWWG or YYWWVG

YY: Take year code last two digitals for a year of grace , ex: 2015→ 15, as year code

WW: Week Code , ex: 15 represents the fifteenth week of year .

C or V : “C” represents the product made in China ,“V” represents the product made in Vietnam ,
Otherwise made in Taiwan without “C &V ”.

G: RoHs Compliant

Product definition :

TG-UT 38A31 S



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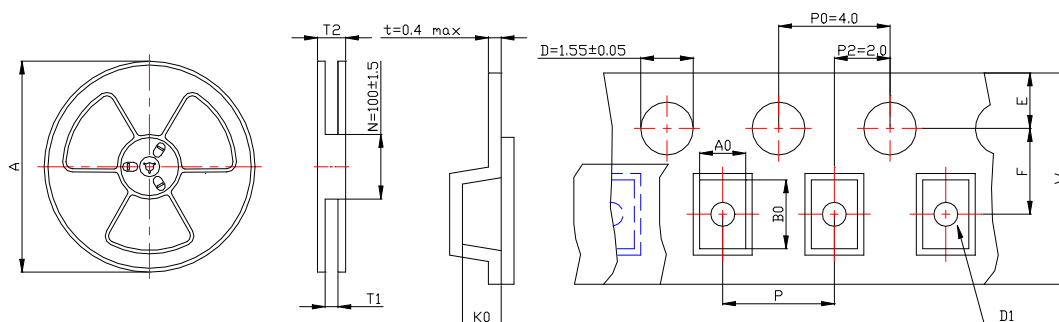
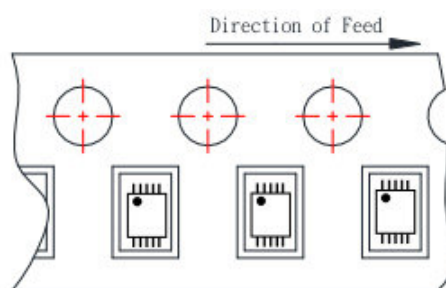
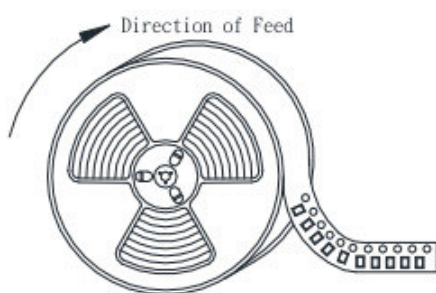
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Transformers Packaging Information Tape And Reel : (UNIT:mm)



ITEM NO.	CARRIER TAPE								PLASTIC REEL			PARTS PER REEL
	W	A ₀	B ₀	K ₀	E	F	P	D ₁	A	T ₁	T ₂	
EFD15-12PIN	44.0	17.35	22.5	9.0	1.75	20.2	24.0	2.0	330	45.4	50.4	250

Unit : mm

Notes:

- 1.) The packaging boxes would be marked with a green product mark that indicates that no lead (Pb) is present in the components and components are applicable to Lead-Free process .
- 2.) UMEC packing information is according with EIA-481-D standard, When W=32mm and other wider tapes that should have elongated sprocket holds on the other side.
- 3.) Approx. Weight : 5.95g/pcs
- 4.) Moisture Sensitivity Parts : Level 1

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Reflow soldering profile for soldering heat resistance testing: (IPC/JEDEC J-STD-020C)

The reflow profile specified in this section describes expected maximum heat exposure of components during the reflow process of UMEC SMD Magnetic Components. Temperature is measured on top of component. All components have to tolerate at least this profile two times (2x) without affecting electrical performance, mechanical performance or reliability.

Pb-free reflow profile requirements for soldering heat resistance			
Parameter	Reference	Specification	
		Large Body Thickness $\geq$ 2.5mm and Volume $\geq$ 350mm ³	Small Body Thickness $\geq$ 2.5mm and Volume <350mm ³
Temperature gradient in preheating		3°C/s max.	
Soak time 150°C- 200°C	T _{soak}	60 -180 seconds	
Time above 217°C (T _l)	t _l	60 - 150 seconds	
Time within 5°C of actual peak	t ₃	20 -40 seconds	
Peak temperature in reflow	T _{peak}	245°C (+0/-5°C)	250°C (+0/-5°C)
Temperature gradient in cooling		6°C/second max	
Time 25 °C to Peak Temperature		8 minutes max.	

Note: The table is defined by UMEC's SMD magnetic components range, for the peak solder temperature rating of other components body, please refer to table 5-2 in IPC/JEDEC J-STD-020C

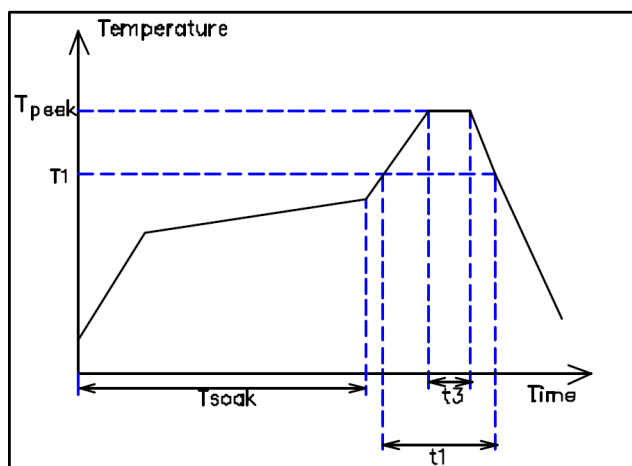


Figure 2. Reflow profile for soldering heat resistance testing

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