KEMET SU10VFC-R20010 alternative

RoHS Compliant

BCEUU10.5LF-102-LF.

SPECIFICATION

CUSTOMER	:	BEC Distribution
PRODUCT	:	BCEUU10.5LF-102-LF
		Pb-free
CODE NO.	:	C05110014
CUS. CODE	:	
SPEC.NO.	:	C-5110-014(02)
DATE	:	2-Mar-05

CUSTOMER APPROVAL

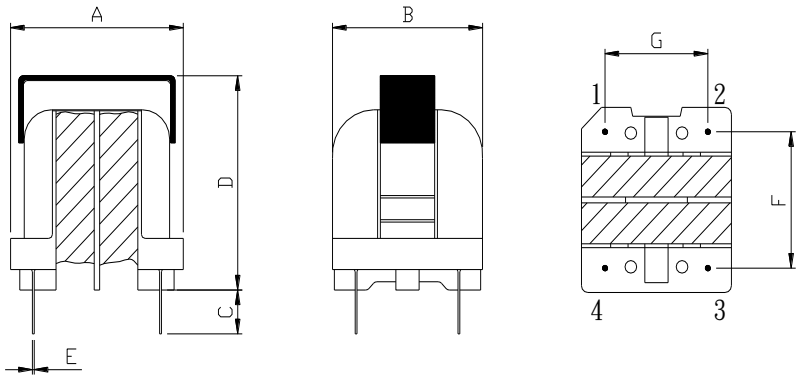
BEC DISTRIBUTION Ltd.
www.bec.co.uk
email: **sales@bec.co.uk** Phone:
08454900 405

PREPARED BY	APPROVED BY	AUTHORIZED BY
JEAN	TONY	MASCOT

KEMET SU10VFC-R20010 alternative

PRODUCT	BCEUU10.5LF-102-LF	COIL SPECIFICATION	DATE	2005/3/2
SPEC.NO.	C-5110-014(02)		CODE NO.	C05110014

EXTERNAL DIMENSIONS :



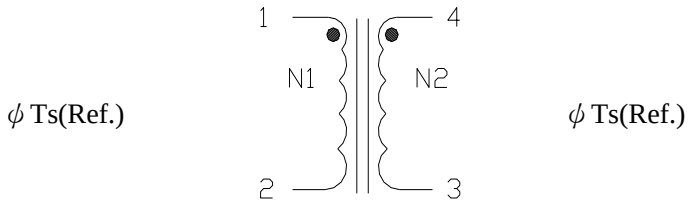
A ： 19.0 Max. m/m
B ： 17.0 Max. m/m
C ： 4.0±1.0 m/m
D ： 22.0 Max. m/m
E ： 0.7±0.1 m/m
F ： 13.0±0.5 m/m
G ： 10.0±0.5 m/m

ELECTRICAL CHARACTERISTIC ：

L(mH)：	1.0 Min.	1KHz 0.25V
DCR(mΩ)：	120	Max.
IDC(A) :	2.0	Max.

Hipot : 1500V/AC 5mA 2sec, winding to winding and Winding to cores.

SCHEMATIC DRAWING ：



MATERIAL LIST :

NO	ITEM	MATERIAL	SUPPLIER OF THE MATERIAL
1			
2			
3			
4			
5			

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TEST DATA

ELECTRICAL CHARACTERISTICS								
MEAS. ITEM	L1(mH)	L2(mH)	DCR1(mΩ)	DCR2(mΩ)				
TEST FREQ.	1KHz 0.25V	1KHz 0.25V	Max.	Max.				
YOUR								
SPEC.	1.0 Min.	1.0 Min.	120	120				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
X	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!				
R	0.00	0.00	0.00	0.00				

DIMENSION								
MEAS. ITEM	A	B	C	D	E	F	G	
TEST FREQ.	m/m	m/m	m/m	m/m	m/m	m/m	m/m	
YOUR								
SPEC.	19.0 Max.	17.0 Max.	4.0±1.0	22.0 Max.	0.7±0.1	13.0±0.5	10.0±0.5	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
X	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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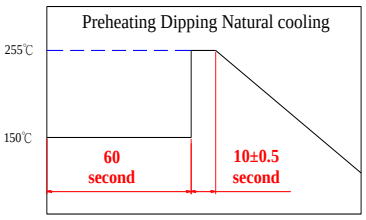
TEST ITEMS	SPECIFICATIONS	TEST CONDITIONS / TEST METHODS
ELECTRICAL PERFORMANCE TEST		
L	REFER TO STANDARD ELEC-TRICAL CHARACTERISTIC LIST.	CH-1061 OR EQUIV.
DCR		CH-502A OR EQUIV
RATED CURRENT		APPLIED THE CURRENT TO COILS THE IDUCTANCE CHANGE SHOULD BE LESS THAN 10% TO INITIAL VALUE AND TEMPERATURE RISE SHOULD NOT BE MORE THAN 40℃..
TEMPERATURERISE TEST	40℃ MAX (△t)	1. APPLIED THE ALLOWED DC CURRENT FOR 4 HOURS. 2. TEMPERATURE MEASURE BY DIGTAL SURFACE THERMOMETER.
OVER LOAD TEST	NO EVIDENCE OF ELECTRICAL DAMAGE	APPLIED 1.5 TIMES OF RATED ALLOWED DC CURRENT TO INDUCTORS FOR A PERIOD OF 5 MINUTES.
MECHANICAL PERFORMANCE TEST		
SOLDER HEAT RESISTANCE	1. INDUCTORS SHOULD HAVE NO EVIDENCE OF ELEC- TRICAL AND MICHANICAL DAMAGE 2. INDUCTANCE SHOULD NOT HANGE MORE THAN± 10% 3. SOLDER MATERIAL WILL BE LEAD FREE.	PREHEAT:150℃ 60SECS SOLDER TEMPERATURE: 255±5℃ FLUX: ROXIN.. DIP TIME:10±0.5SECS. 
VIBRATION TEST (LOW FREQUENCY)		1.AMPLITUDE: 1.5 mm 2.FREQUENCY: 10-55-10HZ / 1 MIN 3.DIRECTION: X, Y, Z 4.DURATION: 2 HRS/X, Y, Z
SHOCK TEST		INDUCTORS SHOULD BE DROPPED 10 TIMES FROM A HEIGHT OF 1m ONTO 3cm WOODEN BOARD.

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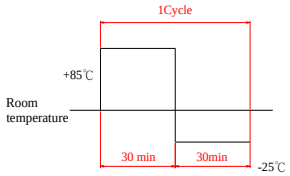
TEST ITEMS	SPECIFICATIONS	TEST CONDITIONS / TEST METHODS
CLIMATIC TEST		
TEMPERATURE CHARACTERISTIC	1.APPEARANCE:NO DAMAGE 2.INDUCTANCE:WITHIN±10% OF INITIAL VALUE.	- 40℃ ~ +85℃
HUMIDITY TEST		60℃±2℃ / 96±2 HOURS
LOW TEMPERATURE STORAGE		1.TEMPERATURE:- 25℃±2℃ 2.TIME: 96±2 HOURS
THERMAL SHOCK TEST		1.-25±5℃ FOR 30 MINUTES. +80±5℃ FOR 30 MINUTES. 2.TOTAL: 10 CYCLES 
HIGH TEMPERATURE STORAGE		1.APPLIED CURRENT: MAX RATED CURRENT 2.TEMPERATURE:80℃±2℃
NOTE：INDUCTORS ARE TO BE TESTED AFTER 2 HOUR AT ROOM TEMPERATURE.		
LIFE TEST		
HIGH TEMPERATURE LOAD LIFE TEST	INDUCTORS SHOULD BE NO EVIDENCE OF SHORT OR OPEN CIRCUIT	1. TEMPERATURE: 80±2℃ 2. TIME: 500±12 HOURS 3. LOAD: ALLOWED DC CURREN
HUMIDITY LOAD LIFE TEST		1. TEMPERATURE: 60±2℃ 2. R.H.: 90-95% 3. TIME: 500±12 HOURS 4. LOAD: ALLOWED DC CURREN

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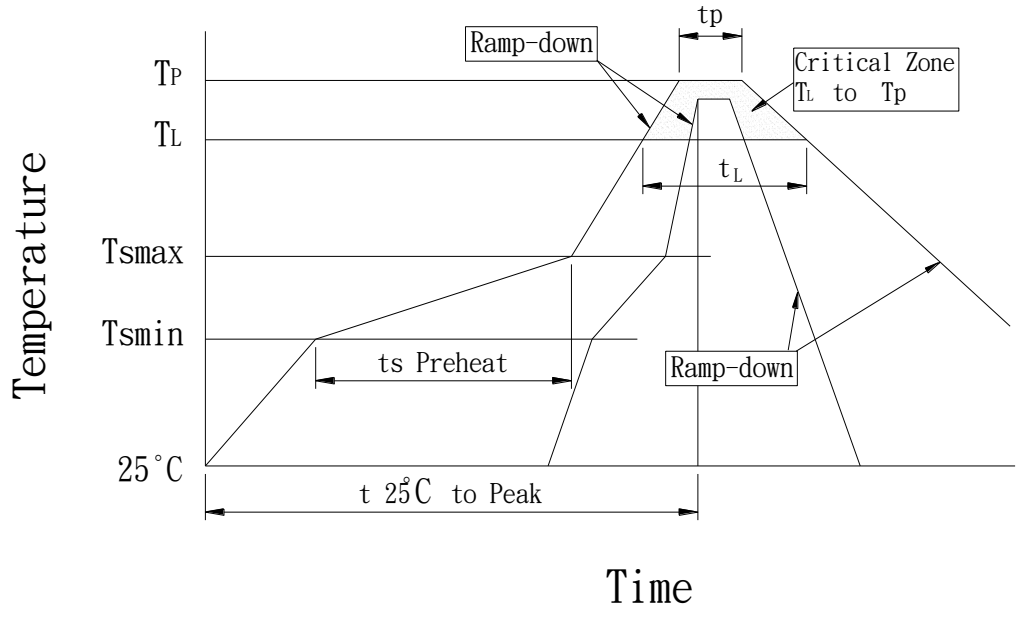
RECOMMENDED SOLDERING CONDITIONS：

CLASSIFICATION REFLOW PROFILES

Profile Feature	Sn-Pb Eutectic Assembly		Pb-Free Assembly	
	Large Body	Small Body	Large Body	Small Body
Average ramp-up rate (T_L to T_P)	3℃/second max.		3℃/second max.	
Preheat -Temperature Min (Ts_{min}) -Temperature Min (Ts_{max}) -Time (min to max) (ts)	100℃ 150℃ 60-120 seconds		150℃ 200℃ 60-180 seconds	
Tsmax to T_L -Ramp-up Rate			3℃/second max.	
Time maintained above: -Temperature (T_L) -Time (t_L)	183℃ 60-150 seconds		217℃ 60-150 seconds	
Peak Temperature (Tp)	225 +0/-5℃	240 +0/-5℃	245 +0/-5℃	255 +5/-5℃
Time within 5℃ of actual Peak Temperature (tp)	10-30 seconds	10-30 seconds	10-30 seconds	20-40 seconds
Ramp-down Rate	6℃/second max.		6℃/second max.	
Time 25℃ to Peak Temperature	6 minutes max.		8 minutes max.	

Note : All temperatures refer t topside of the package. Measured on the package body surface.

REFLOW SLODERINGS



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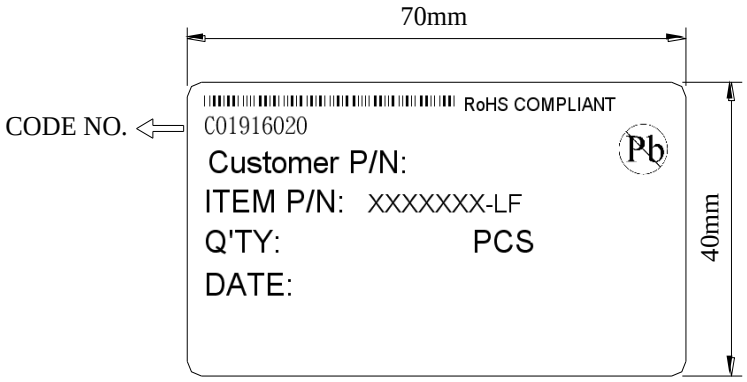
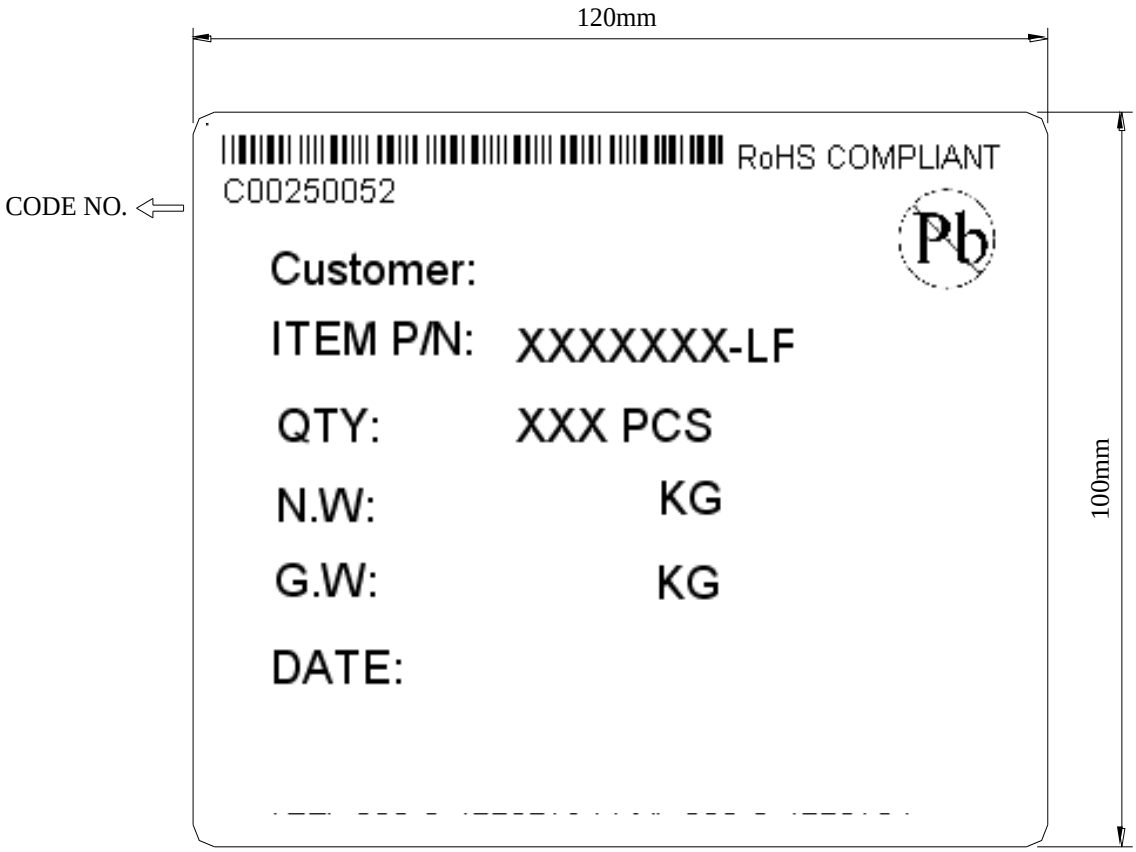
LABLE：



INNER BOX LABEL



OUT BOX LABEL