

SPECIFICATION

FOR

BRITISH POWER SUPPLY CORD (PB FR)

CORD : H05VV-F 3X1.50mm² PVC LEAD FREE

CUSTOMER : VPE/FARNELL

CUSTOMER'S PART No. : 1124373

VOLEX'S SPEC. REF No. : 194219/11

ISSUE No. : 001

DATE : 21ST FEBRUARY 2019

CUSTOMER APPROVED :

APPROVED BY :	
SIGNATURE :	
APPROVED DATE :	
No. OF PAGES :	



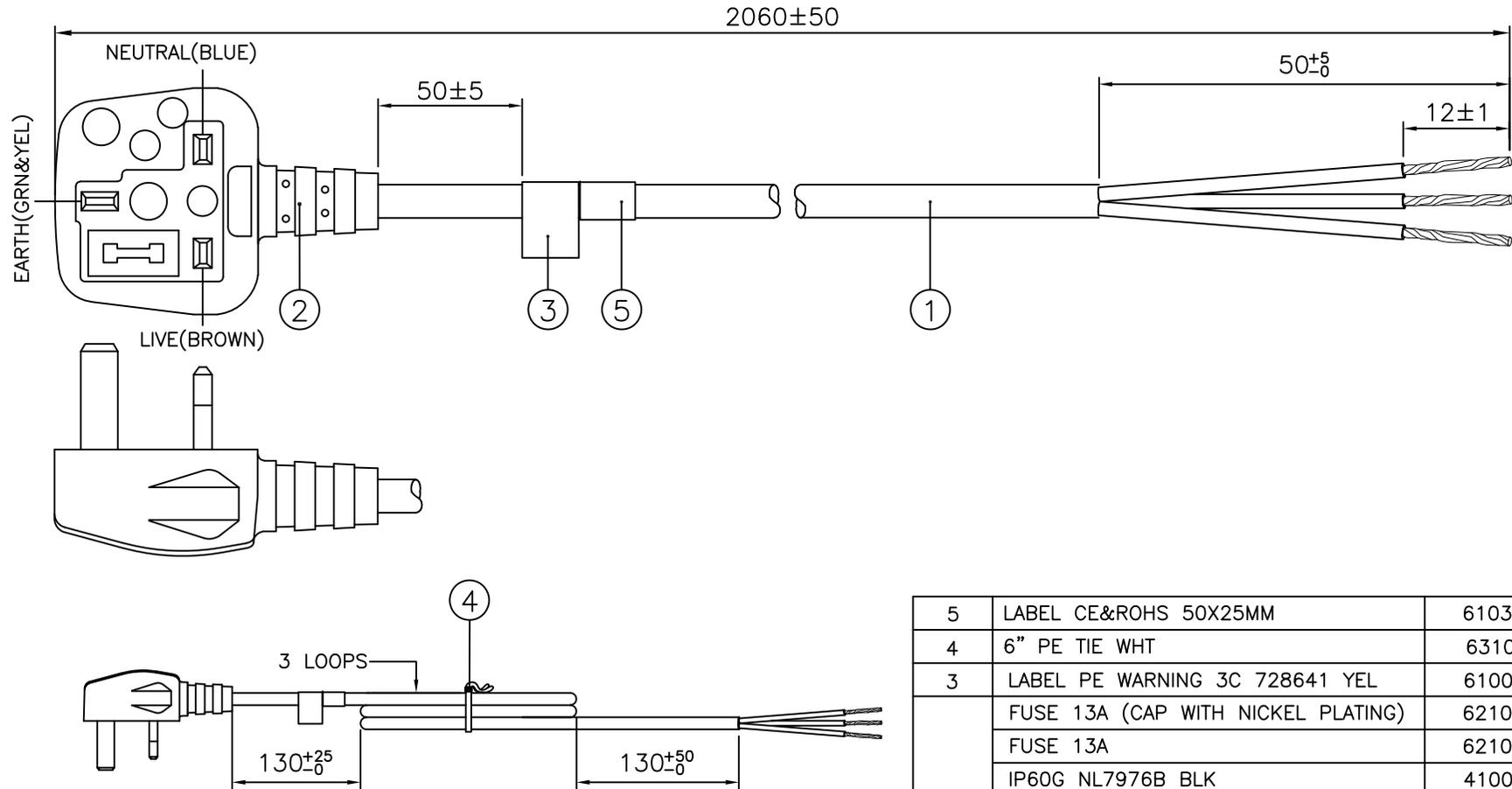
Volex (Asia) Pte Ltd

35 Tampines St. 92

Singapore 528880

Tel : (65) 6788 7833

Fax : (65) 6788 7822



APPROVED SOURCE FOR CABLE

1. BAO HING(SHENZHEN).
2. TONG YUAN(SHENZHEN).
3. TA HSING(SHENZHEN).

NOTE :

1. ALL DIMENSIONS IN mm.
2. THE CORD SHALL COMPLY WITH EN 50525-2-11.
3. THE MOLDED PLUG SHALL COMPLY WITH BS 1363-1.
4. THIS PART CAN BE MANUFACTURED AT ANY LOCATION WHICH HAS SAFETY APPROVAL.

5	LABEL CE&ROHS 50X25MM	6103565	1
4	6" PE TIE WHT	6310055	1
3	LABEL PE WARNING 3C 728641 YEL	6100095	1
2	FUSE 13A (CAP WITH NICKEL PLATING)	6210014	OR
	FUSE 13A	6210002	1
	IP60G NL7976B BLK	4100115	-
2	MOLDED PLUG MP5004 (13A 250V)	MP5004-B	1
1	HO5VV-F 3X1.50 BLK PVC LEAD FREE	1210523	1

S/N	DESCRIPTION	ITEM NUMBER	QTY
TITLE : BRITISH POWER SUPPLY CORD (PB FR)		SCALE : N.T.S.	
CUSTOMER : VPE/FARNELL		PAGE : 1/1	
CUSTOMER PART NUMBER : 1124373		ISSUE	
Reference Number : 194219/11 (EVPE02-044-19)		001	
SALES :	QA :	ENGRG : <i>Alice hongyan</i>	CHECKED BY : <i>JIN JU</i>
Date :	Date :	Date : 22/02/19	Date : 21/02/19
		DRAWN BY : <i>JIN JU</i>	
		Date : 21/02/19	

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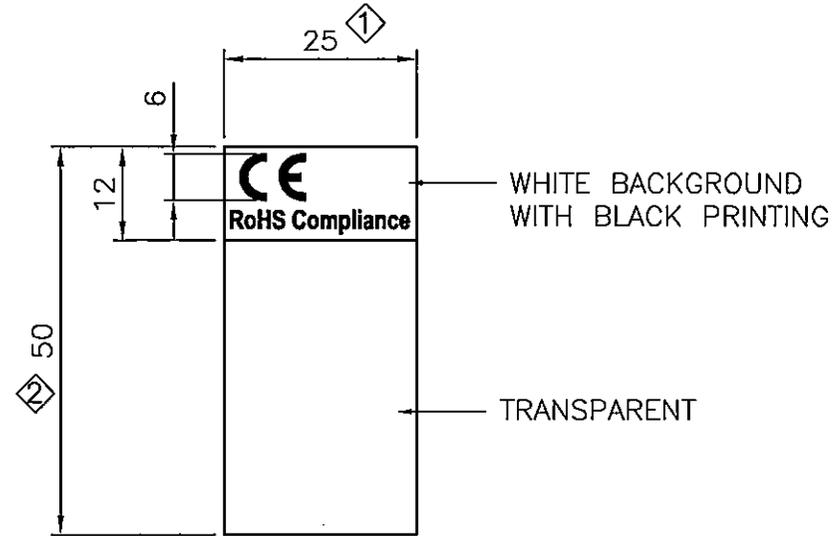
DRAWING NUMBER : REVISION :

L-0649

A

SPECIFICATION :

FACESTOCK MATERIAL	POLYPROPYLENE FILM
FACESTOCK THICKNESS	50 $\mu\text{M} \pm 10\%$
FACESTOCK COLOUR	TRANSPARENT
FACESTOCK SURFACE FINISH	MATTE
ADHESIVE BASE	SOLVENT ACRYLIC
SHELF LIFE	1 YEAR



WHITE BACKGROUND WITH BLACK PRINTING

TRANSPARENT

NOTES :

1. ALL DIMENSION IN MM.
2. GENERAL TOLERANCE $\pm 2\text{MM}$, UNLESS OTHERWISE SPECIFIED.
3. \diamond CRITICAL DIMENSIONS, WHERE Y IS IN NUMERICAL DIGITS.

DRAWN : ALICE		REV	IMM/ECR	BY	DATE	REV	IMM/ECR	BY	DATE	TITLE : CE & ROHS LABEL 50X25MM				Volex (Asia) Pte Ltd <small>Confidential property of Volex. Information contained herein shall not be disclosed to others, reproduced or used for any other purposes except as authorized in writing by an authorized official of Volex Asia.</small>	
RELEASED : 08/11/18		A	IMM	ALICE	14/01/19					ITEM NO.:	FILENAME :	SCALE :	PROJ. :		PAGE :
CHECKED :	SIGN	DATE								6103565-XXXX	\\LABEL\PREPRINTED\L-0649	1 : 1	THIRD ANGLE		1/1
APPROVED :															

REV.	DESCRIPTION	DATE
F	REVERT THE FORMAT.	24/02/05
G	CHANGE THE COMPLIANCE STANDARD PER SAFETY.	23/12/13
	UPDATE FORMAT AS SHOWN.	

1. PVC FLEXIBLE CORD

1.1 SCOPE

This specification shall be in accordance with EN 50525-2-11. 

1.2 CONSTRUCTION

CONDUCTOR	ANNEALED COPPER WIRE
INSULATION	PVC (BLUE, BROWN AND GREEN&YELLOW)
JACKET	PVC

ITEM	UNIT	SPEC. VALUE	
TEMPERATURE RATING	°C	70	
RATED VOLTAGE	V	300/500	
NO. OF CORE	NO.	3	
CONDUCTOR NOMINAL AREA	mm ²	1.50	
MIN. AVE. THICKNESS OF INSULATION	mm	0.70	
MIN. THICKNESS AT ANY POINT OF INSULATION	mm	0.53	
MIN. AVE. THICKNESS OF JACKET	mm	0.90	
MIN. THICKNESS AT ANY POINT OF JACKET	mm	0.665	
OVERALL DIAMETER OF JACKET	mm	7.4~9.4	
DIELECTRIC-STRENGTH TEST IMMERSED IN WATER 20±5°C FOR MINIMUM 1 HOUR	ON COMPLETED CABLE	—	2000V for 15 mins.(minimum)
	ON CORES	—	2000V for 5 mins.(minimum)
VOLTAGE TEST (D.C)	—	—	5000V d.c. for 5 mins.(minimum)
	—	—	2000V a.c. for 5 mins.(minimum)
INSULATION RESISTANCE TEST (70°C)	M Ω km	>0.01	
CONDUCTOR RESISTANCE TEST (20°C)	Ω/km	≤13.3	

TITLE : CABLE SPECIFICATION

EUROPEAN APPROVED POWER SUPPLY CABLE

H05VV-F 3X1.50mm²

SPEC NO. : CS-041EU	APPROVED BY : 	CHECKED BY : 	DRAWN BY : HONGYAN	REVISION : G	 Confidential property of Volex. Information contained herein shall not be disclosed to others, reproduced or used for any other purposes except as authorized in writing by an authorized official of volex asia.
	DATE : 20/12/13	DATE : 27/12/13	DATE : 23/12/13	PAGE : 1/1	

REV.	DESCRIPTION	DATE
	UPDATE THE FORMAT AS SHOWN.	
B	ADD IN '(EU/SAA/SAB/IEC)' ON THE TITLE.	21/01/05
C	ADD NEW MARKING AS SHOWN.	16/11/17

CABLE MARKING

BAO HING (SHENZHEN)

H05VV-F 3G1.5mm² ◁VDE▷ KEMA-KEUR IEMMEQU SABS 1574
 BAOHING GTSA-3 N14586 **CE** LF

OR

△ H05VV-F 3G1.5mm² ◁VDE▷ KEMA-KEUR IEMMEQU
 BAOHING **CE** LF

DRAWN	JIN JU	16/11/17	FILENAME :	TITLE : CABLE MARKING (EU/SAB/SAA/IEC)
CHECK	Feng	16/11/17	CABLE MARKING/ BH/H05/H05W-F	
APPR	Keith	16/11/17	3X1.50 LF-BH	
SCALE	N.T.S.	REV.	C	
REFERENCE :				<i>Volex (Asia) Pte Ltd</i>
H05W-F 3X1.50mm ² LF				
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REV.	DESCRIPTION	DATE
	REMOVE OLD MARKING PER ECR140326	
E	REMOVE NOTE 1.	20/05/15
F	ADD IN NEW MARKING AS SHOWN.	25/12/17

CABLE MARKING

TONG YUAN (SHENZHEN)

H05W-F 3G1.5mm² <VDE> KEMA-KEUR CEBEC +++++ <ÖVE>

Ⓓ Ⓔ Ⓖ Ⓘ IEMMEQU SABS 60227-5 NF-USE 1321FC TONGYUAN LF

OR

⚠ H05W-F 3G1.5mm² <VDE> KEMA-KEUR CEBEC +++++ <ÖVE>

Ⓓ Ⓔ Ⓖ Ⓘ IEMMEQU NF-USE 1321FC TONGYUAN LF

DRAWN	LI XIA	25/12/17	FILENAME :	TITLE : CABLE MARKING (EU/SAB/IEC)
CHECK	Feng	25/12/17	C-MARKING/H05/ NEW MARKING/H05	
APPR	haith	25/12/17	W-F 3X1.5 LF-TY	
SCALE	N.T.S.	REV.	F	
REFERENCE :				Volex (Asia) Pte Ltd <small>Confidential property of Volex. Information contained herein shall not be disclosed to others, reproduced or used for any other purposes except as authorized in writing by an authorized official of volex asia.</small>
H05W-F 3X1.5mm ² LF				

REV.	DESCRIPTION	DATE
D	CHANGE MARKING PER ECN004-15.	18/02/16
	ADD IN NOTE 1.	
E	REMOVE OLD MARKING PER ECR#160527.	21/09/16
	REMOVE NOTE 1.	

CABLE MARKING

TA HSING(SHENZHEN)



<VDE> KEMA-KEUR CEBEC IEMMEQU (D) (N) (S) (FI)

<ÖVE> +s+s+s NF-USE Q050104 IEC 60227 53 H05VV-F
300/500V 3G1.5mm² TA HSING INDUSTRIES LTD. LF

DRAWN	LI XIA	21/09/16	FILENAME :	TITLE : CABLE MARKING (EU/SAA/IEC)
CHECK	<i>[Signature]</i>	21/09/16	CABLE MARKING	
APPR	<i>[Signature]</i>	21/09/16	TH(SZ)/H05VV-F	
SCALE	N.T.S.	REV.	E	
REFERENCE :				Volex (Asia) Pte Ltd
H05VV-F 3G1.5mm ² LF				
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2. PLUG

REV	DESCRIPTION	DATE
AD	ADD IN CATALOG NO. CSUK13A3.	10/01/18
AE	ADD IN CATALOG NO. VBUK13A2.	28/06/18

2.1. SCOPE

The plug shall be in accordance with BS 1363 Part 1,
(Specification for up to 13A fused plugs,switched and unswitched socket-outlets)

2.2. CONSTRUCTION

The plug construction shall comply with our catalogue No: MP5004, MP5004A, MP5004AW, MP5004H, MP5004SC, UK13A2,UK13CBA2,UK10SC3, MP5004BS, MP5004V, UK13A3 , MP5004DBS , MP5004D , VPUK13A3, VPUK13A2, DS13CA2, APUK13A2 , APUK13A3, DS13EA2, MFUK13A2, DLUK10S3, VNUK13A3, LSUK13THA3, VNUK13A2, CSUK13A3 & **VBUK13A2**

2.3. CHARACTERISTICS

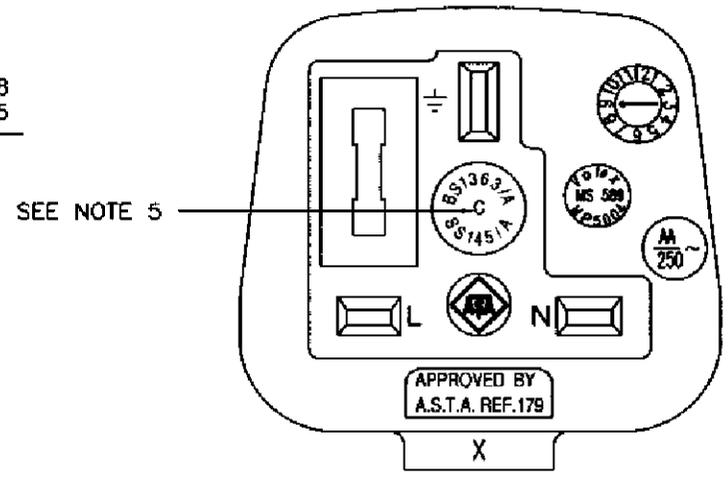
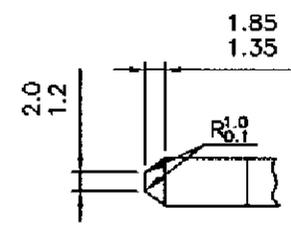
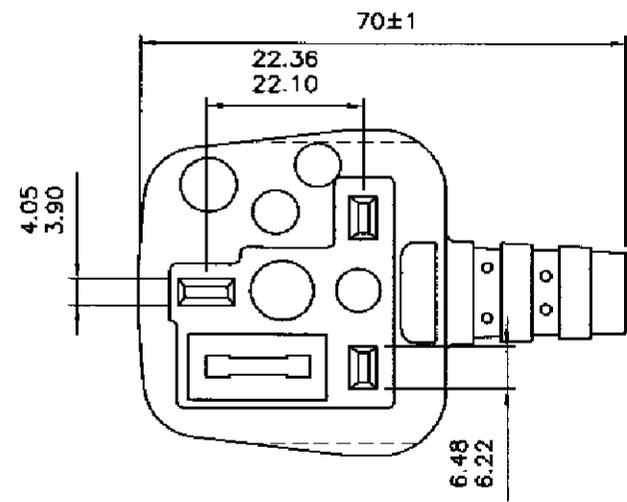
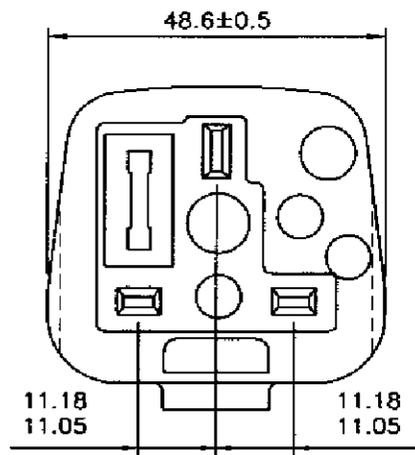
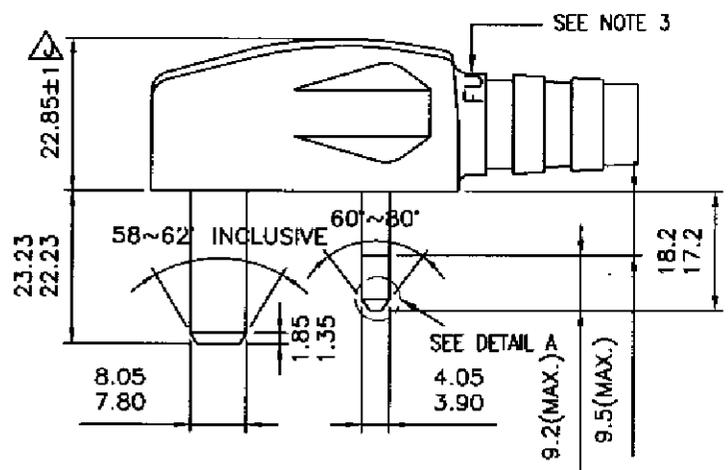
NO.	TEST ITEM	DESCRIPTION	ACCEPTANCE CRITERIA
1.	Moisture resistance test	Samples are kept in a humidity cabinet containing air with a relative humidity between 85 to 95% and a temperature of 20°C-30°C for a duration of 48 hours.	No damage
2.	Electric strength test	A voltage of A.C 2000V with a trip current of min. 100mA is applied for 1 min after the moisture resistance test. A voltage of A.C 6000V is also applied between current carrying parts and body for 1 min.	No flashover and breakdown
3.	Insulation resistance test	This test is measured with a D.C 500V for 1 min. after the moisture resistance test.	Min. 5 M Ohm
4.	Flexing test	The sample shall be loaded with a weight of 1kg for 0.75mm ² or less, or 2kg for 1.00mm ² and above and the oscillating member shall be moved backward and forward through an angle of 90°(45° on either side of the vertical) the number of flexing being 10,000.Rated current of the plug is passed.	No damage to the insulation and the breakage of conductor of each core shall not exceed 10%.
5.	Tumbling test	The samples are dropped from a height of 50cm onto a plywood base(10mm thick) for a total of 5000 times.	No damage
6.	Abrasion test	The pin of sample slopes downwards at angle of 10° to the horizontal. The sample is loaded with a force of 4N on the sleeve of the pin. The number of movement is 20,000 and the length of pin subjected to abrasion is approx. 7mm over the insulating sleeve.	No damage

DRAWN:	WANGHUI	28/06/18	TITLE : BRITISH PLUG
CHECK:	<i>hongyan</i>	28/06/18	
APPR:	<i>heith</i>	28/06/18	
REV:	AE		
REFERENCE:			<i>Volex (Asia) Pte Ltd</i>
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NO.	TEST ITEM	DESCRIPTION	ACCEPTANCE CRITERIA
7.	Heat deformation test	The samples are kept for 1 hour in a heating carbinet at temperature of 70±5°C.	no damage and withstand electric strength test.
8.	Ageing test	The samples are kept for 7 days in a heating carbinet at temperature of 70±5°C. It is then put in room temperature for 4 hours.	no damage
9.	Temperature rise test	Rated current of the plug is passed for at least 4 hours. This test is repeated on the same sample after tumbling barrel test.	Rise in temperature for joints shall not exceed 52K while the rest shall not exceed 37K.
10.	Cord-anchorage test	The cord is subjected to a load of 3kg for (1.0mm ² or smaller) or 6kg (the rest) 25 times without jerk. The cord is then subjected to a torque of 0.15Nm (0.5mm ²), 0.2Nm (0.75mm ²), 0.25Nm (1.0mm ²), 0.3Nm (1.25mm ²), 0.35Nm (1.5mm ²) for 1 min.	Shall withstand a voltage of 3750±75V for 1 min., between each conductor and cord shall not been displaced by more than 2mm.
11.	Pressure test	A force of 20N is applied on the sample for 1 hour at a temperature of 70±5°C.	No damage and shall withstand electric strength and insulation resistance test. The sample must also fit into fig. 5 jig of BS1363.
12.	Ball pressure test	A steel ball of 5mm in diameter is applied with 20N force on the sample at a temperature of 75±5°C for 1 hour. The sample is then cooled by cold water.	The diameter of the impression shall not exceed 2mm.
13	Glow wire test	The tip of the glow wire heated electrically to 750±10°C shall be applied at the portion between the current-carrying pins for a period of 30s.	Any flame and glowing shall extinguish within 30s after the removal of the glow-wire. There shall be no ignition of the tissue papernor sorching of the board.

DRAWN:	WANGHUI	28/06/18	TITLE : BRITISH PLUG
CHECK:	<i>hongyan</i>	28/06/18	
APPR:	<i>heith</i>	28/06/18	
REV:	AE		
REFERENCE:			<i>Volex (Asia) Pte Ltd</i> <small>Confidential property of Volex. Information contained herein shall not be disclosed to others, reproduced or used for any other purposes except as authorized in writing by an authorized official of volex asia.</small>

REV.	DESCRIPTION	DATE
	REMOVE THE CLOSED FACTORY FROM MANU.	
I	LOCATION MARK.	17/07/09
J	CHANGE DIM. FM. '22.85±0.3' TO '22.85±1' PER ECR100291.	30/03/10



NOTE :

- 1.) ALL DIMENSIONS IN mm.
- 2.) X - CAVITY NO. (OPTIONAL)
- 3.) THE WORD IS ' FUSED '.
- 4.) AA - RATING : (REFER TO THE TABLE)
- 5.) MARKING 'C' FOR CABLE 1.25mm² & ABOVE. WITHOUT 'C' FOR CABLE 1.0mm² & BELOW.

TABLE :

FUSE RATING (AA)	3	5	10	13	✓

HG	HENG GANG (CHINA)	X	DRAWN	HONGYAN	30/03/10	FILE NAME :	TITLE :	
SMI	ZHONGSHAN (CHINA)	X	CHECK	<i>hongyan</i>	20/02/10	A-PLUS/UK/ GENERAL/MP5004	MOLDED PLUG MP5004	
VH	HANOI (VIETNAM)	X	APPR	<i>wat</i>	30/3/10	-ASTA		
B	BATAM (INDONESIA)	X	REV.	J	SCALE	N.T.S.		
VC	CHENNAI (INDIA)	X	REFERENCE :				Volex (Asia) Pte Ltd	
MANUFACTURE LOCATION MARK (' X ' IS APPLICABLE ONLY)			BRITISH APPROVAL				Confidential property of Volex. Information contained herein shall not be disclosed to others, reproduced or used for any other purposes except as authorized in writing by an authorized official of Volex Asia.	

REV.	DESCRIPTION	DATE
A	INITIAL RELEASE.	29/06/12

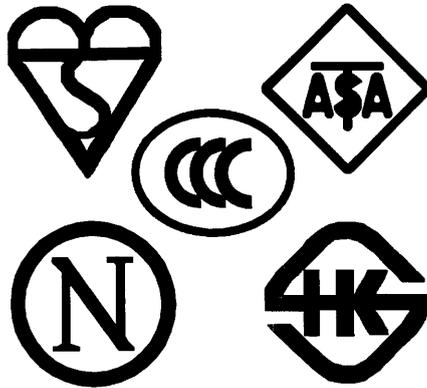
AsiaFuse
 AF63-13A
13A
 BS1362
 SS167



DRAWN	HONGYAN	29/06/12	REVISION:	TITLE : LEAD FREE FUSE (13A)
CHECK	<i>hongyan</i>	<i>06/07/12</i>		
APPR	<i>WCS</i>	<i>4/7/12</i>	A	
SCALE	N.T.S.			
REFERENCE :				Volex

REV.	DESCRIPTION	DATE
A	INITIAL RELEASE.	29/06/12

SEM®



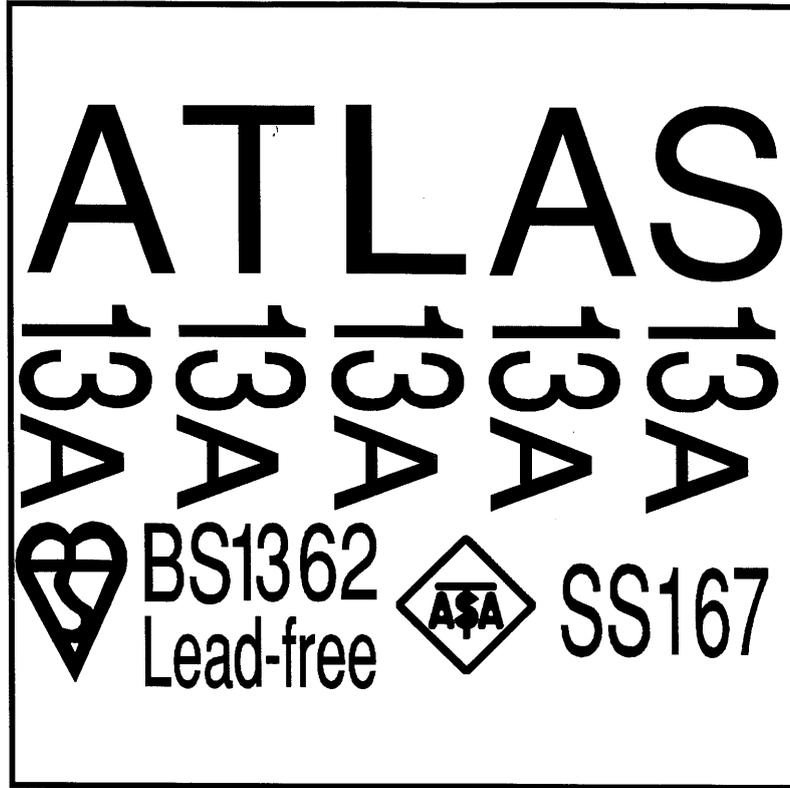
13A

BS1362

LEAD FREE

DRAWN	HONGYAN	29/06/12	REVISION:	TITLE : LEAD FREE FUSE (13A)
CHECK	<i>hongyan</i>	04/07/12		
APPR	<i>W.S.</i>	4/7/12		
SCALE	N.T.S.	A		
REFERENCE :				Volex

REV.	DESCRIPTION	DATE
	ADD IN 'REFERENCE E07.013-C'	
C	IN REFERENCE COLUMN.	31/07/08
D	CHANGE MARKING AS SHOWN.	13/11/12

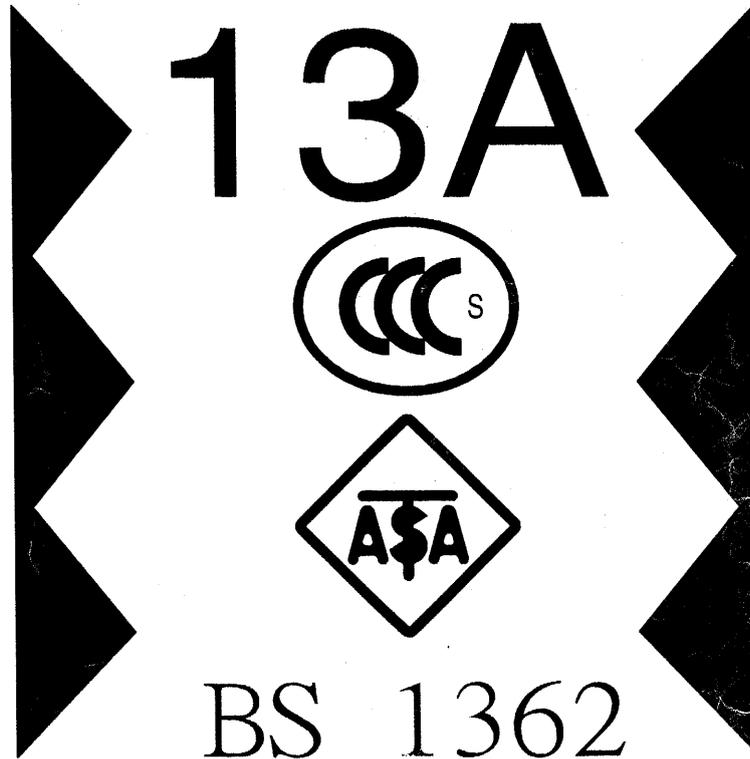


DRAWN	HONGYAN	13/11/12	REVISION: D	TITLE : LEAD FREE FUSE (13A)
CHECK	<i>hongyan</i>	13/11/12		
APPR	<i>Wet</i>	13/11/12		
SCALE	N.T.S.			
REFERENCE :				Volex
6210002 (REFERENCE E07.013-C)				

REV.	DESCRIPTION	DATE
	ADD IN 'TYPE REFERENCE TDC 180	
E	-13A' IN REFERENCE COLUMN.	14/07/08
F	AMEND NOTE FOR ADD IN ITEM b.	29/08/08

*PRINT BLOCK TOPS WITH MACHINE NUMBERS

Bussmann



NOTE:

(1) *PRINT BLOCK TOP (DOT LINE) = BUSSMANN INTERNAL IDENTIFICATION ON MACHINERY.

a: DIFFERENT LOCATION/NUMBER OF DOT LINE INDICATE DIFFERENT MACHINE NUMBER USED.

△ b: THE FUSE PRODUCE ON THE MACHINE #20 IS WITHOUT THE PRINT BLOCK TOP (DOT LINE).

DRAWN	QIAN SM	29/08/08	REVISION:	TITLE : LEAD FREE FUSE (13A)
CHECK	<i>Wet</i>	29/08/08		
APPR	<i>Qian</i>	29/08/08	F	
SCALE	N.T.S.			
REFERENCE :				
6210014 (TYPE REFERENCE TDC 180-13A)			Volex	