Intrinsically Safe Surface ISF001 Series Fuse **Mount Fuses**



IECEx / ATEX Certified Fuse – No encapsulation required

Features

- Intrinsically safe component
- Eliminates the need to encapsulate fuses in circuit
- Speeds up Intrinsic Safety product certification process
- Certified for Mining as well as Surface applications _
- Available with a wide range of donor fuses from all the principal manufacturers
- No effect on electrical or physical specification of donor fuse, including RoHS compliance
- Maximum soldering temperature is 260° C
- Compatible with lead-free soldering systems
- Electroless gold plated finish standard silver to special order
- Suitable for circuits having voltages not exceeding 30 volts or not exceeding 60 volts under coating

Requirements for Donor Fuse

- 1206 footprint
- Maximum allowable rating 3.0 Amps
- Must comply with IEC 60127-4 or UL 248 parts 1 and 14
- Suitable manufacturers AVX, Bartec, Bel, Bourns, Bussma Holly, Kamaya, Littelfuse, Mateknix, Optifuse, Pico Electronics, Optional edge plating Pad – electroless gold finish Raychem, SIBA, Schurter, SOC, Vishay & Wickmann

Packaging

- Packed in reels of 1000 for pick and place applications
- Smaller quantities of certain fuse types available. Check with Sales Team for details.

Certification Details

International Certification:	IECEx SIR 07.0050U	
European Certification:	Sira 05ATEX 2274U	
Ex Protection:	Ex ia I Ma	
	Ex ia IIC Ga	
Marking required:		
Ambient Temperature Range:	-50° C to $+93^{\circ}$ C (I _N = 2 A max)	
	-50°C to +80°C (I _N = 3 A max)	
Temperature Classification: (For fuse rating 0 to 3 amps)	Max temperature rise at 1.7 times I_N = 85K	

Maximum Installed Circuit Voltage: 30 volts or 60 volts under coating, complying with clause 6.3.8 of IEC 60079-11:2011

Conditions of Safe Use

1) The mounting of the fuse shall be such that its creepage and clearance distances comply with table 5 of IEC 60079-11:2011

2) This data sheet shall be used in conjunction with the donor fuse manufacturer's data sheet to determine suitability of the fuse.

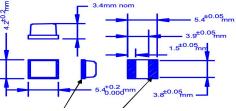
3) It will be necessary to determine a surface temperature classification for the encapsulated fuse by considering the maximum ambient and temperature rise of the fuse - see 'Temperature Classification' in table above.

4) Due to size limitations, these overmoulded fuses bear no marking information or size identification; this information is shown on the product packaging label and detailed in this data sheet. Please refer to these items in order to determine the suitability of the particular fuse before use.

IS Fusion Ltd, Unit 8, Mile Oak Industrial Estate, Maesbury Road, Oswestry, Shropshire, SY10 8GA, United Kingdom. Tel: +44 (0) 1691 670222 E-mail: sales@isfusion.co.uk Web: www.isfusion.co.uk ISF001 Issue 5







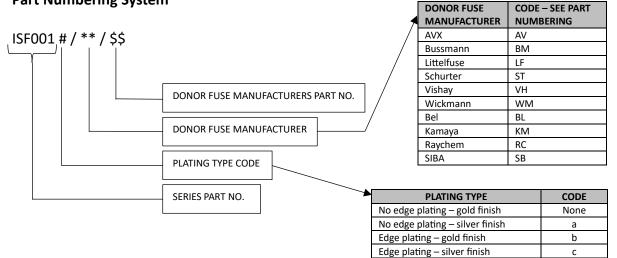
Intrinsically Safe Surface <u>ISF001 S</u> Mount Fuses

ISF001 Series Fuse



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Part Numbering System



Examples of Typical Part Nos.

These are examples picked at random which demonstrates the part numbering system for the certified fuse.

Donor Fuse Manufacturer	Manufacturers Part Number	Plating Type	IS Fuse Part Number
Littelfuse 466 series 125mA	0466.125	No edge plating / gold finish	ISF001/LF/0466.125
Schurter USF 1206 series 0.5A	3413.0113	Edge plating / gold finish	ISF001b/ST/3413.0113
Vishay MFU 12-6 series 1.25A	MFU1206-FF1A25	Edge plating / gold finish	ISF001b/VH/MFU1206- 1A25
Bel CIQ series 2A	C1Q2	No edge plating / gold finish	ISF001/BL/C1Q2