

## Intrinsically Safe Surface Mount Fuses

IECEX/ATEX Certified Fuse - No encapsulation required

**ISF001 Series Fuse    IECEx and ATEX certified**

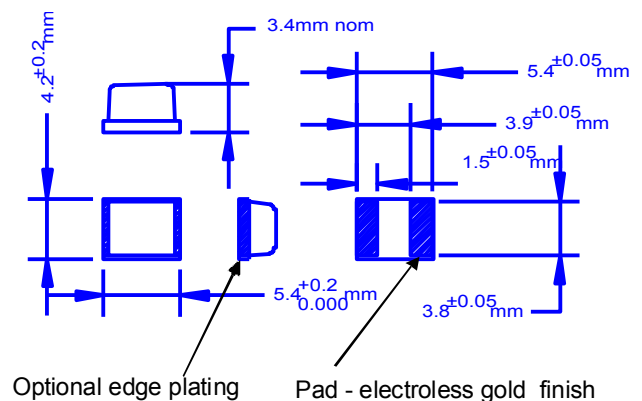
**NEW**

### Features

- Intrinsically safe component, certified to IEC/EN 60079-0:2011  
IEC/EN 60079-11:2011 and  
IEC/EN 60079-26:2007
- 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 wide range of donor fuses from all the principal manufacturers
- No effect on electrical or physical specification of donor fuse, including RoHS compliance
- Flat topped surface for pick and place operations
- 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



Dimensions:



### 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, Bussmann, Holly, Kamaya, Littelfuse, Mateknix, Optifuse, Pico Electronics, 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 for details.

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#### Certification Details

Certificates: International European	IECEX SIR 07.0050U Sira 05ATEX2274U
Ex Protection:	Ex ia I Ma Ex ia IIC Ga
Marking required by Directive 94/9/EC	 I M1 II 1 G
Ambient Range	-50°C to +93°C (I <sub>N</sub> = 2 A max) -50°C to +80°C (I <sub>N</sub> = 3 A max)
Temperature Classification for fuse rating 0 to 3 amps	Max Temperature rise at 1.7 times I <sub>N</sub> = 85K
Maximum Installed Circuit Voltage	30 Volts or 60 Volts under coating, complying with clause 6.3.8 of IEC60079 -11:2006

#### 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 60079-11:2006
- 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.

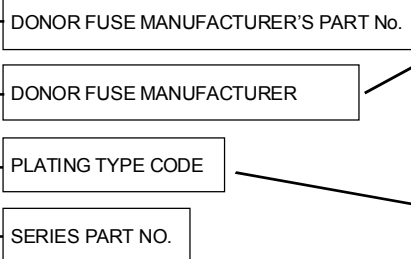
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### Part Numbering System

**ISF001#/\*\*/\$\$**



DONOR FUSE MANUFACTURER	CODE - SEE PART NUMBERING
AVX	AV
Bussmann	BM
Littelfuse	LF
Schurter	ST
Vishay	VH
Wickmann	WM
Bel	BL
Kamaya	KM
Raychem	RC
SIBA	SB

Plating Type	Code
No edge plating - gold finish	NONE
No edge plating - silver finish	a
Edge plating - gold finish	b
Edge plating - silver finish	c

### Examples of Typical Part Nos.

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

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