

Features

- IEC 60127-3/3 – 250 VAC – Time-Lag
- Can operate continuously at full rated current
- Socket mountable – IS Replaceable – compatible sockets available
- Fuse resistance guaranteed – for resistance ranges see specification P005-08
- Eliminates the need to encapsulate fuses in a circuit
- A minimum of 1mm of solid insulation is provided in all directions
- Speeds up Intrinsic Safety product certification process
- Suitable for Mining as well as Surface applications
- Directly solderable on printed circuit boards
- Low breaking capacity



Standards

IEC 60127-3/3
UL 248-14
CSA C22.2 no. 248.14

Approvals


Pre-encapsulated Fuse:
VDE Certificate Number: 40002080
UL File Number: E41599
CSA File Number: 51172

Technical Data

| | |
|-------------------|-----------------------------|
| Rated Voltage | 250VAC |
| Rated Current | 0.05 – 6.3A |
| Breaking Capacity | 35A – 63A |
| Characteristic | Time-Lag T |
| Mounting | PCB, THT |
| Fuse Resistance | Tables available on request |

| | |
|------------------------------|---|
| Soldering Methods | Wave, Iron |
| Solderability | 235°C / 2 sec acc. to IEC 60068-2-20 Test Ta, method 1 |
| Resistance to Soldering Heat | 260°C / 5 sec acc. to IEC 60068-2-20 Test Tb, method 1A |
| Terminal Strength | MIL-STD-202, method 211A (Deflection of board 1mm for 1 minute) |

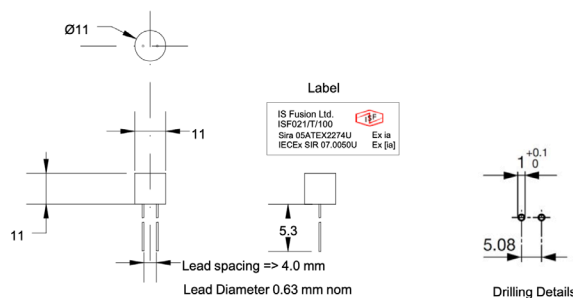
Certification Details

International Certification: IECEx SIR 07.0050U
 European Certification: Sira 05ATEX 2274U
 Ex Protection: Ex ia I Ma
 Ex ia IIC Ga
 Marking required:  I M1
 II 1 G
 Ambient Temperature Range: -50°C to +93°C (I_N = 5A max)
 -50°C to +80°C (I_N = 6.3A max)
 Maximum Installed Circuit Voltage: 90 Volts or 250 Volts under coating

Conditions of Safe Use

- 1) The mounting of the fuse shall be such that its creepage and clearances distances comply with table 5 of IEC 60079-11:2011
- 2) The maximum external surface temperature rise of the fuses: 85K
- 3) 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.

Dimensions



Pre-Arcing Time

| Rated Current In | 1.5 x in max. | 2.1 x in max. | 2.75 x in min. | 2.75 x in max. | 4.0 x in min. | 4.0 x in max. | 10.0 x in max. |
|------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| 0.05A – 6.3A | 60 min | 120 sec | 400 ms | 10 s | 150 ms | 20 ms | 150 ms |

| Part Number | Rated Current (A) | Rated Voltage (VAC) | Breaking Capacity | Voltage Drop 1.0 In max. (mV) | Voltage Drop 1.0 In typ. (mV) | Power Dissipation In max (mW) | Melting I ² t 10.0 In typ. (A ² s) |
|---------------|-------------------|---------------------|-------------------|-------------------------------|-------------------------------|-------------------------------|--|
| ISF021/T/050 | 0.05 | 250 | 1) | 550 | 415 | 155 | 0.03 |
| ISF021/T/063 | 0.063 | 250 | 1) | 480 | 420 | 160 | 0.05 |
| ISF021/T/080 | 0.08 | 250 | 1) | 400 | 360 | 165 | 0.06 |
| ISF021/T/100 | 0.1 | 250 | 1) | 350 | 320 | 170 | 0.08 |
| ISF021/T/125 | 0.125 | 250 | 1) | 300 | 270 | 180 | 0.12 |
| ISF021/T/160 | 0.16 | 250 | 1) | 280 | 190 | 190 | 0.24 |
| ISF021/T/200 | 0.2 | 250 | 1) | 260 | 150 | 200 | 0.35 |
| ISF021/T/250 | 0.25 | 250 | 1) | 240 | 120 | 220 | 0.6 |
| ISF021/T/315 | 0.315 | 250 | 1) | 220 | 120 | 250 | 0.8 |
| ISF021/T/400 | 0.4 | 250 | 1) | 200 | 110 | 280 | 1.1 |
| ISF021/T/500 | 0.5 | 250 | 1) | 190 | 100 | 310 | 2.5 |
| ISF021/T/630 | 0.63 | 250 | 1) | 180 | 90 | 360 | 4 |
| ISF021/T/800 | 0.8 | 250 | 1) | 160 | 80 | 430 | 8 |
| ISF021/T/1.0 | 1 | 250 | 1) | 140 | 70 | 500 | 12 |
| ISF021/T/1.25 | 1.25 | 250 | 1) | 130 | 70 | 600 | 15 |
| ISF021/T/1.6 | 1.6 | 250 | 1) | 120 | 60 | 730 | 30 |
| ISF021/T/2.0 | 2 | 250 | 1) | 100 | 60 | 870 | 34 |
| ISF021/T/2.5 | 2.5 | 250 | 1) | 100 | 50 | 1000 | 55 |
| ISF021/T/3.15 | 3.15 | 250 | 1) | 100 | 50 | 1200 | 76 |
| ISF021/T/4.0 | 4.0 | 250 | 2) | 100 | 50 | 1400 | 80 |
| ISF021/T/5.0 | 5 | 250 | 3) | - | 50 | - | 230 |
| ISF021/T/6.3 | 6.3 | 250 | 3) | - | 45 | - | 360 |

NOTE:

- 1) IEC 35A @ 250 VAC and UL 35A @ 250 VAC / 50 A @125 VDC
- 2) IEC 10 In @ 250 VAC and UL 10 In @ 250 VAC / 10 In @ 125 VDC
- 3) IEC 10 In @ 250 VAC and UL 10 In @ 250 VAC / 10 In @ 63 VDC