

## FEATURES

- HIGH INRUSH, SLOW BLOW FUSE
- CASE SIZE 6125 (6.1MM X 2.5MM); 2410 (0.24" x 0.10")
- 125VAC WITH CURRENT RATINGS UP TO 5 AMPS
- SAFETY STANDARD APPROVAL (UL File Number E358637)
- COMPATIBLE WITH FLOW AND REFLOW SOLDERING
- RoHS COMPLIANT & HALOGEN FREE

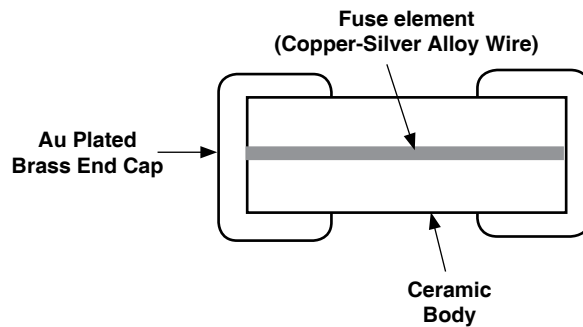
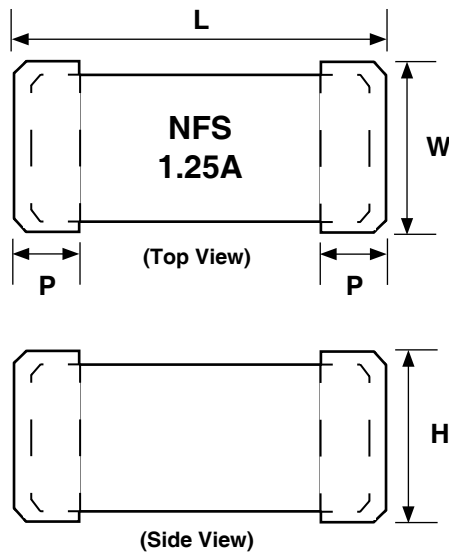
**RoHS  
Compliant**  
includes all homogeneous materials\*

\*See Part Number System for Details



## SPECIFICATIONS

| Type      | Case Size | Rated Current (Amps) | Rated Voltage (VAC) | Temperature Range | Case Dimensions |           |           |           |
|-----------|-----------|----------------------|---------------------|-------------------|-----------------|-----------|-----------|-----------|
|           |           |                      |                     |                   | L               | W         | H         | P         |
| NFVC6125S | 6125      | 0.2 ~ 5.0            | 125V                | -55°C ~ +125°C    | 6.1 ± 0.20      | 2.5 ± 0.1 | 2.5 ± 0.1 | 1.4 ± 0.1 |



## PART NUMBERING SYSTEM

**NFVC 6125 S 1R25 TR F**

- Series
- Case Size Code
- Fuse Type: Slow Blow
- Current Rating: 1R25 = 1.25Amps
- TR = Tape & Reel
- RoHS Compliant\*

\*Exemption 7a - Lead in high melting temperature solder (lead based alloy with 85% by weight or more lead)

## SAFETY AGENCY CERTIFICATION

| Agency | File Number | Ampere Range |
|--------|-------------|--------------|
| UL     | E358637     | 0.5 ~ 5.0    |
|        | Pending     | 0.2 ~ 0.375  |

UL Certification: JDYX2.E358637

UL Certification Canada: JDYX8.E358637

Fuses, Supplemental Certified Components

These fuses provide supplemental protection in end-use equipment to provide protection for components or internal circuits. They are not suitable for branch or feeder circuit use

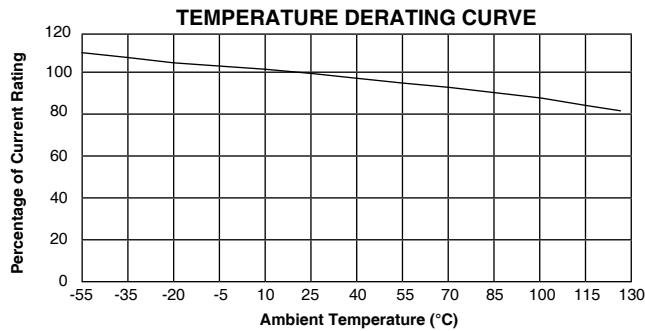


## AVAILABLE VALUES AND RATINGS

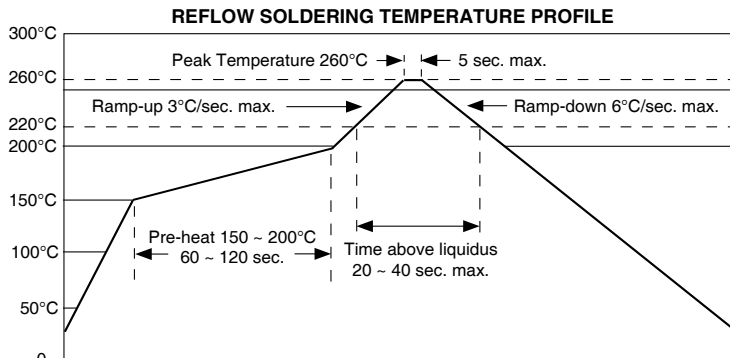
| Part Number       | Current Rating @ +25°C | Marking | Typical Cold Resistance (mΩ)* | Opening Time (% of Current Rating) |               | Melting I <sup>2</sup> T (A <sup>2</sup> ×s) nominal** | Rated Voltage | Interrupt Rating                |
|-------------------|------------------------|---------|-------------------------------|------------------------------------|---------------|--|---------------|---------------------------------|
|                   |                        |         |                               | 100%                               | 200%          |  |               |                                 |
| NFVC6125S0R20TRF  | 0.2                    | 200     | 1200                          | 4 hrs min.                         | 120 sec. max. | 0.056  | 125VAC        | UL 50A 125VAC<br><br>50A 125VDC |
| NFVC6125S0R25TRF  | 0.25                   | 250     | 980                           |                                    |               | 0.065  |               |                                 |
| NFVC6125S0R315TRF | 0.315                  | 315     | 680                           |                                    |               | 0.155  |               |                                 |
| NFVC6125S0R375TRF | 0.375                  | 375     | 480                           |                                    |               | 0.200  |               |                                 |
| NFVC6125S0R50TRF  | 0.5                    | 500     | 250                           |                                    |               | 0.312  |               |                                 |
| NFVC6125S0R75TRF  | 0.75                   | 750     | 190                           |                                    |               | 0.512  |               |                                 |
| NFVC6125S1R00TRF  | 1.0                    | 1A      | 126                           |                                    |               | 3.12   |               |                                 |
| NFVC6125S1R25TRF  | 1.25                   | 1.25A   | 101                           |                                    |               | 4.21   |               |                                 |
| NFVC6125S1R50TRF  | 1.5                    | 1.5A    | 78                            |                                    |               | 4.98   |               |                                 |
| NFVC6125S1R60TRF  | 1.6                    | 1.6A    | 74                            |                                    |               | 5.85   |               |                                 |
| NFVC6125S2R00TRF  | 2.0                    | 2A      | 52                            |                                    |               | 7.20   |               |                                 |
| NFVC6125S2R50TRF  | 2.5                    | 2.5A    | 38                            |                                    |               | 14.05  |               |                                 |
| NFVC6125S3R00TRF  | 3.0                    | 3A      | 30                            |                                    |               | 16.92  |               |                                 |
| NFVC6125S3R15TRF  | 3.15                   | 3.15A   | 26                            |                                    |               | 18.68  |               |                                 |
| NFVC6125S3R50TRF  | 3.5                    | 3.5A    | 24                            |                                    |               | 21.95  |               |                                 |
| NFVC6125S4R00TRF  | 4.0                    | 4A      | 21                            |                                    |               | 32.80  |               |                                 |
| NFVC6125S5R00TRF  | 5.0                    | 5A      | 14                            | 37.57                              |               |  |               |                                 |

\* Resistance measured at ≤ 10% rated current and +25°C

\*\* Melting I<sup>2</sup>T at 10 times the rated current.

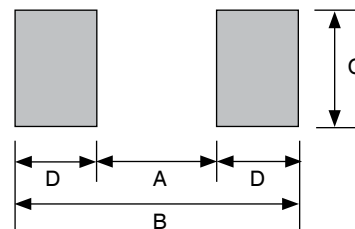


| Temp (°C) | Derating Factor |
|-----------|-----------------|
| -55       | 113.82          |
| -45       | 112.15          |
| -35       | 110.24          |
| -25       | 108.60          |
| -15       | 106.86          |
| -5        | 105.22          |
| +5        | 103.48          |
| +15       | 101.64          |
| +25       | 100.00          |
| +35       | 98.29           |
| +45       | 96.58           |
| +55       | 95.01           |
| +65       | 93.42           |
| +75       | 91.75           |
| +85       | 89.95           |
| +95       | 87.96           |
| +105      | 86.08           |
| +115      | 84.25           |
| +125      | 82.35           |



### Recommended Reflow Land Pattern Dimensions (mm)

| Case Size | A         | B         | C         | D         |
|-----------|-----------|-----------|-----------|-----------|
| 6125      | 3.0 ± 0.3 | 8.0 ± 0.3 | 3.0 ± 0.3 | 2.5 ± 0.3 |

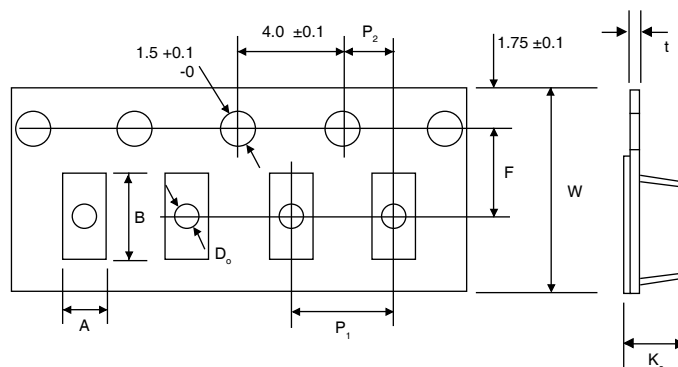


## RELIABILITY TEST

| Item                            | Test Conditions/Method  | Performance  | Standard                                     |
|---------------------------------|---|--|--|
| Time/Current                    | 100% I <sub>n</sub>   | No fusing; 4 hours minimum                                   | UL248-14                                     |
|                                 | 200% I <sub>n</sub>   | <120 seconds   | IEC-60127-4                                  |
|                                 | 1000% I <sub>n</sub>  | >10ms  | IEC-60127-4                                  |
| Voltage Drop                    | 100% of rated current   | 0.5A ~ 5A <300mV<br>0.2A ~ 0.375A <500mV                     | IEC-60127-4                                  |
| Endurance Test                  | 100 cycles at 100% of rated current for 1 hour, off for 15 minutes followed by 125% of rated current for 1 hour and test temperature rise | ΔR  < 10%<br>ΔT < 75°C                                       | IEC-60127-4                                  |
| Interrupting Ability            | 50A @ 125VAC/125VDC   | Without permanent arcing, ignition and bursting of fuse link | UL248-14<br>IEC-60127-4                      |
| Solderability                   | 240°C ±5°C, 3 seconds ±0.5s   | 95% coverage minimum   | IEC-60127-4<br>IEC-60068-2-20<br>Mil-Std-202 |
| Resistance to Soldering Heat    | 260°C ±5°C, 10 seconds ±0.5s  | ΔR : <10%  | Mil-Std-202<br>Method 210                    |
| High Temperature Operating Life | T = 70°C ±2°C, 0.6 I <sub>n</sub> , 96 hours  | ΔR : <10%  | Mil-Std-202<br>Method 108                    |
| Humidity (Steady State)         | T = 40°C ±2°C, 90 ~ 95% RH, 1000 hours  | ΔR : <10%  | Mil-Std-202<br>Method 103                    |
| Low Temperature Storage         | T = -55°C ±3°C, 96 hours  | ΔR : <10%  | IEC-60068-2-1                                |
| High Temperature Storage        | T = 125°C ±2°C, 96 hours  | ΔR : <10%  | IEC-60068-2-2                                |
| Salt Spray                      | 5% salt solution, 48 hours  | ΔR : <10%  | Mil-Std-202<br>Method 101                    |
| Thermal Shock                   | 100 cycles between -65°C/+125°C, 60 minutes; each extreme   | ΔR : <(10%+0.005Ω)   | IEC 60068-2-14                               |

## EMBOSED PLASTIC CARRIER DIMENSIONS (mm)

| Type      | A          | B          | W          | F          | E          | P <sub>1</sub> | P <sub>2</sub> | φD        | T <sub>1</sub> | K <sub>o</sub> |
|-----------|------------|------------|------------|------------|------------|----------------|----------------|-----------|----------------|----------------|
| NFVC6125S | 2.70 ±0.10 | 6.40 ±0.10 | 12.0 ±0.15 | 5.50 ±0.10 | 1.75 ±0.10 | 4.00 ±0.10     | 2.00 ±0.10     | 1.50 min. | 0.25 ±0.05     | 2.70 ±0.10     |



## REEL DIMENSIONS (mm) AND QUANTITY

| Type      | A $\pm 2.0$ | B $\pm 2.0$ | C $\pm 0.5$ | E $\pm 0.20$ | W $\pm 1.0$ | Qty   |
|-----------|-------------|-------------|-------------|--------------|-------------|-------|
| NFVC6125S | 178         | 58          | 13          | 2.0          | 12.5        | 1,000 |

