



**THE DATASHEET OF
1SMAF4762A**



**1SMAF4728A
THRU
1SMAF4777A**

SILICON PLANAR ZENER DIODE

FEATURES

- * Total power dessepeateon: Max. 1 W
- * Small plastec package suetable for surface mounted desegn.
- * Case: SMAF

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Top View

Simplified outline SMAF and symbol

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| PARAMETER | SYMBOL | VALUE | UNITS |
|--|-----------------------------------|--------------|-------|
| DC Power dissipation at TL = 75 °C(Note 1) | P _D | 1.0 | W |
| Maximum forward voltage at If=200mA | V _F | 1.2 | Volts |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | °C |

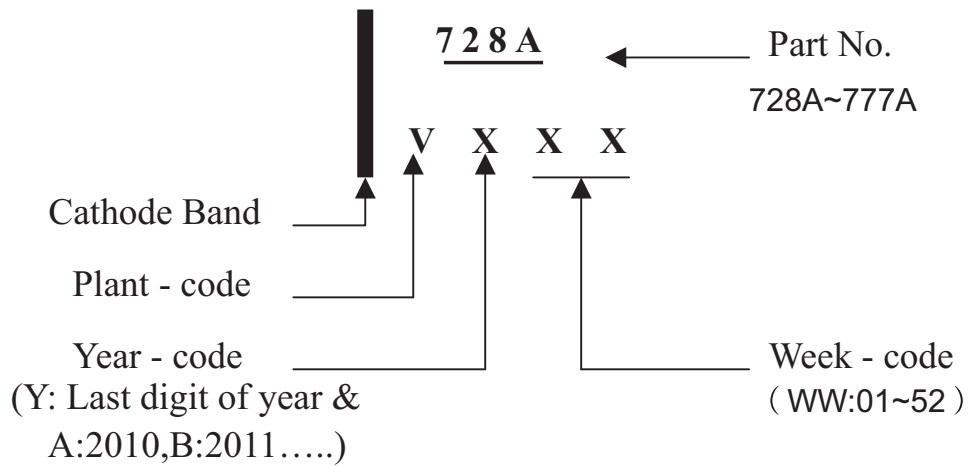
NOTES : 1. TL=Lead temperature at 3/8" (9.5mm)from body

2018-06/61
REV:0

| TYPE | MARKING | Zener voltage Range Vz(V)@Izt | | | Test current | Dynamic impedance | Maximum Reverse leakage current | | Admissibl e zener current |
|------------|---------|----------------------------------|---------|---------|-----------------|----------------------|------------------------------------|---------|---------------------------------|
| | | Min | Nom | Max | Izt(mA) | ZzT(@IzT) | IR | VR | Izm(mA) |
| | | (Volts) | (Volts) | (Volts) | | (Ω) | (μ A) | (Volts) | |
| 1SMAF4728A | 728A | 3.1 | 3.3 | 3.5 | 75 | 10 | 100 | 1 | 285 |
| 1SMAF4729A | 729A | 3.4 | 3.6 | 3.8 | 69 | 10 | 100 | 1 | 263 |
| 1SMAF4730A | 730A | 3.7 | 3.9 | 4.1 | 64 | 9 | 50 | 1 | 243 |
| 1SMAF4731A | 731A | 4.06 | 4.3 | 4.56 | 58 | 9 | 25 | 1 | 219 |
| 1SMAF4732A | 732A | 4.5 | 4.7 | 4.93 | 53 | 8 | 10 | 1 | 203 |
| 1SMAF4733A | 733A | 4.84 | 5.1 | 5.36 | 49 | 7 | 10 | 1 | 186 |
| 1SMAF4734A | 734A | 5.32 | 5.6 | 5.92 | 45 | 5 | 10 | 2 | 170 |
| 1SMAF4735A | 735A | 5.86 | 6.2 | 6.51 | 41 | 2 | 10 | 3 | 154 |
| 1SMAF4736A | 736A | 6.46 | 6.8 | 7.18 | 37 | 3.5 | 10 | 4 | 140 |
| 1SMAF4737A | 737A | 7.12 | 7.5 | 7.88 | 34 | 4 | 10 | 5 | 127 |
| 1SMAF4738A | 738A | 7.79 | 8.2 | 8.67 | 31 | 4.5 | 10 | 6 | 116 |
| 1SMAF4739A | 739A | 8.6 | 9.1 | 9.59 | 28 | 5 | 10 | 7 | 104 |
| 1SMAF4740A | 740A | 9.5 | 10 | 10.5 | 25 | 7 | 10 | 7 | 95 |
| 1SMAF4741A | 741A | 10.4 | 11 | 11.6 | 23 | 8 | 5 | 8 | 86 |
| 1SMAF4742A | 742A | 11.4 | 12 | 12.6 | 21 | 9 | 5 | 9 | 79 |
| 1SMAF4743A | 743A | 12.4 | 13 | 14.1 | 19 | 10 | 5 | 10 | 71 |
| 1SMAF4744A | 744A | 13.8 | 15 | 15.8 | 17 | 14 | 5 | 11 | 63 |
| 1SMAF4745A | 745A | 15.2 | 16 | 17.1 | 16 | 16 | 5 | 12 | 58 |
| 1SMAF4746A | 746A | 16.8 | 18 | 19.2 | 14 | 20 | 5 | 13 | 52 |
| 1SMAF4747A | 747A | 19.0 | 20 | 21.2 | 13 | 22 | 5 | 15 | 47 |
| 1SMAF4748A | 748A | 20.8 | 22 | 23.3 | 12 | 23 | 5 | 17 | 43 |
| 1SMAF4749A | 749A | 22.8 | 24 | 26.0 | 11 | 25 | 5 | 18 | 38 |
| 1SMAF4750A | 750A | 25.3 | 27 | 28.9 | 9.5 | 35 | 5 | 21 | 35 |
| 1SMAF4751A | 751A | 28.2 | 30 | 32.0 | 8.5 | 40 | 5 | 23 | 31 |
| 1SMAF4752A | 752A | 31.3 | 33 | 34.9 | 7.5 | 45 | 5 | 25 | 28 |
| 1SMAF4753A | 753A | 34.2 | 36 | 37.9 | 7.0 | 50 | 5 | 27 | 26 |
| 1SMAF4754A | 754A | 37.2 | 39 | 41.5 | 6.5 | 60 | 5 | 30 | 24 |
| 1SMAF4755A | 755A | 40.9 | 43 | 45.6 | 6.0 | 70 | 1 | 32 | 22 |
| 1SMAF4756A | 756A | 44.9 | 47 | 49.8 | 5.5 | 80 | 1 | 35 | 20 |
| 1SMAF4757A | 757A | 48.6 | 51 | 54.0 | 5.0 | 95 | 1 | 38 | 18 |
| 1SMAF4758A | 758A | 53.6 | 56 | 58.8 | 4.5 | 110 | 1 | 42 | 17 |
| 1SMAF4759A | 759A | 58.9 | 62 | 65.6 | 4.0 | 125 | 1 | 47 | 15 |
| 1SMAF4760A | 760A | 64.6 | 68 | 71.7 | 3.7 | 150 | 1 | 52 | 14 |
| 1SMAF4761A | 761A | 71.2 | 75 | 78.8 | 3.3 | 175 | 1 | 56 | 12 |
| 1SMAF4762A | 762A | 77.9 | 82 | 87.0 | 3.0 | 200 | 1 | 62 | 11 |
| 1SMAF4763A | 763A | 86.0 | 91 | 96.0 | 2.8 | 250 | 1 | 69 | 10 |
| 1SMAF4764A | 764A | 95.0 | 100 | 105 | 2.5 | 350 | 1 | 76 | 9.5 |
| 1SMAF4765A | 765A | 104 | 110 | 116 | 2.3 | 450 | 1 | 84 | 8.6 |
| 1SMAF4766A | 766A | 114 | 120 | 127 | 2.0 | 550 | 1 | 91 | 7.8 |
| 1SMAF4767A | 767A | 125 | 135 | 142 | 1.9 | 700 | 1 | 100 | 7 |
| 1SMAF4768A | 768A | 140 | 150 | 157 | 1.7 | 900 | 1 | 110 | 6.3 |
| 1SMAF4769A | 769A | 155 | 165 | 172 | 1.6 | 1100 | 1 | 120 | 5.8 |
| 1SMAF4770A | 770A | 170 | 180 | 191 | 1.4 | 1200 | 1 | 135 | 5.2 |
| 1SMAF4771A | 771A | 189 | 200 | 211 | 1.2 | 1400 | 1 | 150 | 4.7 |
| 1SMAF4772A | 772A | 209 | 220 | 231 | 1 | 1600 | 1 | 165 | 4.3 |
| 1SMAF4773A | 773A | 229 | 240 | 251 | 1 | 1800 | 1 | 180 | 3.9 |
| 1SMAF4774A | 774A | 249 | 260 | 271 | 1 | 2000 | 1 | 190 | 3.7 |
| 1SMAF4775A | 775A | 269 | 280 | 291 | 1 | 2100 | 1 | 205 | 3.4 |
| 1SMAF4776A | 776A | 289 | 300 | 315 | 1 | 2300 | 1 | 230 | 3.1 |
| 1SMAF4777A | 777A | 313 | 330 | 346 | 1 | 2500 | 1 | 250 | 2.8 |



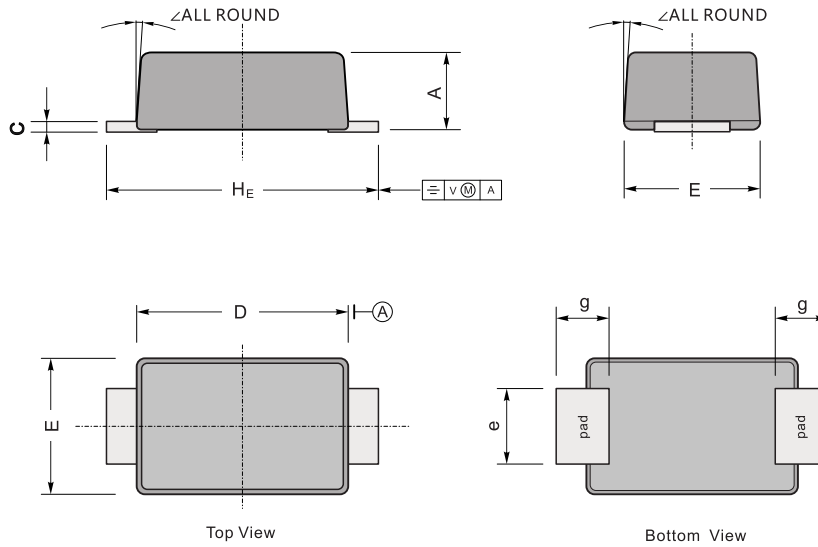
Marking on the body



PACKAGE OUTLINE

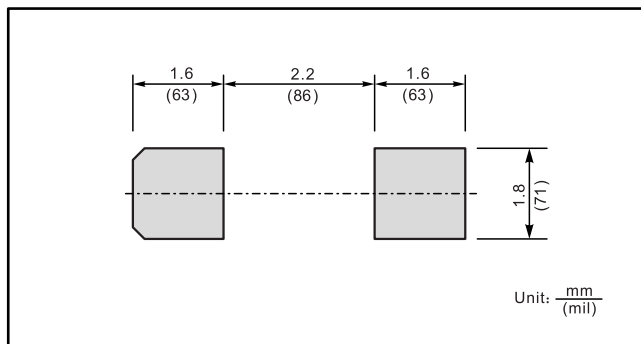
Plastic surface mounted package; 2 leads

SMAF



| UNIT | | A | C | D | E | e | g | H _E | \angle |
|------|-----|-----|------|-----|-----|-----|-----|----------------|----------|
| mm | max | 1.1 | 0.20 | 3.7 | 2.7 | 1.6 | 1.2 | 4.9 | 7° |
| | min | 0.9 | 0.12 | 3.3 | 2.4 | 1.3 | 0.8 | 4.4 | |
| mil | max | 43 | 7.9 | 146 | 106 | 63 | 47 | 193 | |
| | min | 35 | 4.7 | 130 | 94 | 51 | 31 | 173 | |

The recommended mounting pad size



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

| PACKAGE | PACKING CODE | EA PER REEL | EA PER INNER BOX | COMPONENT SPACE (mm) | TAPE SPACE (mm) | REEL DIA (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|-------------|------------------|----------------------|-----------------|---------------|------------------|---------------|------------------|
| SMAF | -T | 3,000 | 12,000 | --- | --- | 178 | 390*205*310 | 96,000 | --- |



DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View 1SMAF4762A on WIN SOURCE](#)
-  [Rectron USA Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management