




SPECIFICATION SHEET

| | |
|--------------------------------|---|
| SPECIFICATION SHEET NO. | Q0726-SMAP4SMA10CASC |
| DATE | July 26, 2023 |
| REVISION | A0 |
| DESCRIPTION | <p>SMD Transient Voltage Suppressor (TVS) Diodes, SMA/DO-214AC series, P4SMA10CA Type, 2 Pads, Bidirectional</p> <p>Breakdown Voltage (V BR) 10V Average Value.</p> <p>Peak Pulse Power: 400 Watts.</p> <p>Operating Temp. Range -55°C ~+150°C</p> <p>Package in Tape/Reel, 5000pcs/13" Reel</p> <p>RoHS/RoHS III compliant</p> |
| CUSTOMER | |
| CUSTOMER PART NUMBER | |
| CROSS REF. PART NUMBER | |
| ORIGINAL PART NUMBER | MDD P4SMA10CA |
| PART CODE | SMAP4SMA10CASC |

| | | |
|-------------------------|---|--|
| VENDOR APPROVE | | |
| Issued/Checked/Approved |  |  |
| |  | |
| DATE: July 26, 2023 | | |

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|-------------------------|--|
| CUSTOMER APPROVE | |
| | |
| DATE: | |

7/27/2023

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES



MAIN FEATURE

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Low profile package
- Glass Passivated Die Construction
- Low inductance
- 6.8V - 550V Standoff Voltages Average Value
- Excellent clamping capability
- 400W peak pulse power capability at 10/1000µs waveform
- Fast response time

APPLICATION

- I/O interface
- AC/DC power supply
- Low frequency signal transmission line (RS232, RS485, etc.)

RFQ
[Request For Quotation](#)

PART CODE GUIDE

| SMA | P4SMA10CA | SC |
|-----|-----------|----|
| 1 | 2 | 3 |

- 1) **SMA**: SMD Transient Voltage Suppressor (TVs) Diodes, SMA /DO-214AC series,
- 2) **P4SMA10CA**: Type code for original part number P4SMA10CA
- 3) **SC**: Internal Control Code, (A~Z or 1~9 or Blank) or custom parametric data code.

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

DIMENSION (Unit: Inch/mm)

Image for reference



Marking: standard

* See Marking Code List

SMA/DO-214AC



Recommend Pad Layout



| Symbol | Unit (Inch) | Unit (mm) |
|--------|-------------|-----------|
| A | 0.066 | 1.680 |
| B | 0.060 | 1.520 |
| C | 0.154 | 3.900 |
| D | 0.095 | 2.410 |
| E | 0.215 | 5.450 |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

MECHANICAL DATA

| Case | Terminals | Polarity | Marking | Weight per piece |
|--|---|--|------------------------------|---------------------------------|
| JEDEC SMA/DO-214AC molded plastic body | Solderable per MIL-STD-750, Method 2026 | Cathode Band (Note: Bi-directional device have no polarity indicator) | See Marking Code List | 0.00095ounce, 0.027grams |

MAX. RATING & CHARACTERISTICS - Ratings at 25°C Ambient Temperature Unless Otherwise Specified.

| Parameter | | SYMBOLS | VALUE | UNITS |
|---|---------|---------|----------------------------|-------|
| Peak Pulse Power Dissipation on TA=25°C (Note 1,2,4, Fig1) | | P ppm | 400 | W |
| Peak Forward Surge Current (Note 3, Fig4) | | I FSM | 60 | A |
| Peak Pulse Current on 10/1000 us waveform (Note 1) | | I PPM | <i>See Table 1~Table 6</i> | W |
| ESD Voltage per IEC6100-4-2 | Contact | V ESD1 | ± 30 | kV |
| | Air | V ESD2 | ± 30 | kV |
| Typical Thermal Resistance Junction to Ambient (Note 2) | | R θJA | 100 | °C/W |
| Operating junction temperature range | | T J | -55 ~ +150 | °C |
| Storage temperature range | | T stg | -55 ~ +150 | °C |

Notes

1. Non-repetitive current pulse, per Fig 3 and derated above TA=25 °C per Fig 2
2. Mounted on 5.0*5.0mm (Thickness 0.03mm) copper pads to each terminal
3. Peak Forward Surge Current : 8.3ms single half sine-wave Superimposed on rated load (JEDEC method).
4. Peak pulse power waveform is 10/1000µS.

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

UNIDIRECTIONAL TYPE- ELECTRICAL CHARACTERISTICS - Ta = 25°C

Table 1

| Part Code | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current | Marking Code |
|----------------|---------------------------|-------------------|------|--------------|-----------------|--------------------|--------------------|--------------|
| | | V BR @ I T | | | | | | |
| | V RMV | Min | Max | I T | I R @ V RWM | V C @ I PPM | I PPM | |
| | V | V | V | mA | µA | V | A | |
| SMAP4SMA6V8ASA | 5.8V | 6.45 | 7.14 | 10 | 1000 | 10.5 | 39.0 | 6V8A |
| SMAP4SMA7V5ASA | 6.4 | 7.13 | 7.88 | 10 | 500 | 11.3 | 36.3 | 7V5A |
| SMAP4SMA8V2ASA | 7.02 | 7.79 | 8.61 | 10 | 200 | 12.1 | 33.9 | 8V2A |
| SMAP4SMA9V1ASA | 7.78 | 8.65 | 9.55 | 1 | 50 | 13.4 | 30.6 | 9V1A |
| SMAP4SMA10AS0A | 8.55 | 9.5 | 10.5 | 1 | 10 | 14.5 | 28.3 | 10A |
| SMAP4SMA11AS0A | 9.4 | 10.5 | 11.6 | 1 | 5 | 15.6 | 26.3 | 11A |
| SMAP4SMA12AS0A | 10.2 | 11.4 | 12.6 | 1 | 5 | 16.7 | 24.6 | 12A |
| SMAP4SMA13AS0A | 11.1 | 12.4 | 13.7 | 1 | 1 | 18.2 | 22.5 | 13A |
| SMAP4SMA15AS0A | 12.8 | 14.3 | 15.8 | 1 | 1 | 21.2 | 19.3 | 15A |
| SMAP4SMA16AS0A | 13.6 | 15.2 | 16.8 | 1 | 1 | 22.5 | 18.2 | 16A |
| SMAP4SMA18AS0A | 15.3 | 17.1 | 18.9 | 1 | 1 | 25.5 | 16.1 | 18A |
| SMAP4SMA20AS0A | 17.1 | 19 | 21 | 1 | 1 | 27.7 | 14.8 | 20A |
| SMAP4SMA22AS0A | 18.8 | 20.9 | 23.1 | 1 | 1 | 30.6 | 13.4 | 22A |
| SMAP4SMA24AS0A | 20.5 | 22.8 | 25.2 | 1 | 1 | 33.2 | 12.3 | 24A |
| SMAP4SMA27AS0A | 23.1 | 25.7 | 28.4 | 1 | 1 | 37.5 | 10.9 | 27A |
| SMAP4SMA30AS0A | 25.6 | 28.5 | 31.5 | 1 | 1 | 41.4 | 9.9 | 30A |
| SMAP4SMA33AS0A | 28.2 | 31.4 | 34.7 | 1 | 1 | 45.7 | 9 | 33A |
| SMAP4SMA36AS0A | 30.8 | 34.2 | 37.8 | 1 | 1 | 49.9 | 8.2 | 36A |
| SMAP4SMA39AS0A | 33.3 | 37.1 | 41 | 1 | 1 | 53.9 | 7.6 | 39A |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

UNIDIRECTIONAL TYPE- ELECTRICAL CHARACTERISTICS - Ta = 25°C

Table 2

| Part Code | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current | Marking Code |
|----------------|---------------------------|-------------------|------|--------------|-----------------|--------------------|--------------------|--------------|
| | | V BR @ I T | | | | | | |
| | V RMV | Min | Max | I T | I R @ V RWM | V C @ I PPM | I PPM | |
| | V | V | V | mA | µA | V | A | |
| SMAP4SMA43AS0A | 36.8 | 40.9 | 45.2 | 1 | 1 | 59.3 | 6.9 | 43A |
| SMAP4SMA47AS0A | 40.2 | 44.7 | 49.4 | 1 | 1 | 64.8 | 6.3 | 47A |
| SMAP4SMA51AS0A | 43.6 | 48.5 | 53.6 | 1 | 1 | 70.1 | 5.8 | 51A |
| SMAP4SMA56AS0A | 47.8 | 53.2 | 58.8 | 1 | 1 | 77 | 5.3 | 56A |
| SMAP4SMA62AS0A | 53 | 58.9 | 65.1 | 1 | 1 | 85 | 4.8 | 62A |
| SMAP4SMA68AS0A | 58.1 | 64.6 | 71.4 | 1 | 1 | 92 | 4.5 | 68A |
| SMAP4SMA75AS0A | 64.1 | 71.3 | 78.8 | 1 | 1 | 103 | 4 | 75A |
| SMAP4SMA82AS0A | 70.1 | 77.9 | 86.1 | 1 | 1 | 113 | 3.6 | 82A |
| SMAP4SMA91AS0A | 77.8 | 86.5 | 95.5 | 1 | 1 | 125 | 3.3 | 91A |
| SMAP4SMA100ASA | 85.5 | 95 | 105 | 1 | 1 | 137 | 3 | 100A |
| SMAP4SMA110ASA | 94 | 105 | 116 | 1 | 1 | 152 | 2.7 | 110A |
| SMAP4SMA120ASA | 102 | 114 | 126 | 1 | 1 | 165 | 2.5 | 120A |
| SMAP4SMA130ASA | 111 | 124 | 137 | 1 | 1 | 179 | 2.3 | 130A |
| SMAP4SMA150ASA | 128 | 143 | 158 | 1 | 1 | 207 | 2 | 150A |
| SMAP4SMA160ASA | 136 | 152 | 168 | 1 | 1 | 219 | 1.9 | 160A |
| SMAP4SMA170ASA | 145 | 162 | 179 | 1 | 1 | 234 | 1.8 | 170A |
| SMAP4SMA180ASA | 154 | 171 | 189 | 1 | 1 | 246 | 1.7 | 180A |
| SMAP4SMA200ASA | 171 | 190 | 210 | 1 | 1 | 274 | 1.5 | 200A |
| SMAP4SMA220ASA | 185 | 209 | 231 | 1 | 1 | 328 | 1.3 | 220A |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

UNIDIRECTIONAL TYPE- ELECTRICAL CHARACTERISTICS - Ta = 25°C

Table 3

| Part Code | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current | Marking Code |
|----------------|---------------------------|-------------------|-------|--------------|-----------------|--------------------|--------------------|--------------|
| | | V BR @ I T | | | | | | |
| | V RMV | Min | Max | I T | I R @ V RWM | V C @ I PPM | I PPM | |
| | V | V | V | mA | µA | V | A | |
| SMAP4SMA250ASA | 214 | 237 | 263 | 1 | 1 | 344 | 1.2 | 250A |
| SMAP4SMA300ASA | 256 | 285 | 315 | 1 | 1 | 414 | 1 | 300A |
| SMAP4SMA350ASA | 300 | 332 | 368 | 1 | 1 | 482 | 0.9 | 350A |
| SMAP4SMA400ASA | 342 | 380 | 420 | 1 | 1 | 548 | 0.8 | 400A |
| SMAP4SMA440ASA | 376 | 418 | 462 | 1 | 1 | 602 | 0.7 | 440A |
| SMAP4SMA480ASA | 408 | 456 | 504 | 1 | 1 | 658 | 0.6 | 480A |
| SMAP4SMA510ASA | 434 | 485 | 535 | 1 | 1 | 698 | 0.6 | 510A |
| SMAP4SMA530ASA | 451 | 503.5 | 556.5 | 1 | 1 | 725 | 0.6 | 530A |
| SMAP4SMA540ASA | 460 | 513 | 567 | 1 | 1 | 740 | 0.5 | 540A |
| SMAP4SMA550ASA | 468 | 522.5 | 577.5 | 1 | 1 | 760 | 0.5 | 550A |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

BIDIRECTIONAL TYPE- ELECTRICAL CHARACTERISTICS - Ta = 25°C

Table 4

| Part Code | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current | Marking Code |
|-----------------------|---------------------------|-------------------|-------------|--------------|-----------------|--------------------|--------------------|--------------|
| | | V BR @ I T | | | | | | |
| | V RMV | Min | Max | I T | I R @ V RWM | V C @ I PPM | I PPM | |
| | V | V | V | mA | µA | V | A | |
| SMAP4SMA6V8CAC | 5.8V | 6.45 | 7.14 | 10 | 1000 | 10.5 | 39.0 | 6V8C |
| SMAP4SMA7V5CAC | 6.4 | 7.13 | 7.88 | 10 | 500 | 11.3 | 36.3 | 7V5C |
| SMAP4SMA8V2CAC | 7.02 | 7.79 | 8.61 | 10 | 200 | 12.1 | 33.9 | 8V2C |
| SMAP4SMA9V1CAC | 7.78 | 8.65 | 9.55 | 1 | 50 | 13.4 | 30.6 | 9V1C |
| SMAP4SMA10CASC | 8.55 | 9.5 | 10.5 | 1 | 10 | 14.5 | 28.3 | 10C |
| SMAP4SMA11CASC | 9.4 | 10.5 | 11.6 | 1 | 5 | 15.6 | 26.3 | 11C |
| SMAP4SMA12CASC | 10.2 | 11.4 | 12.6 | 1 | 5 | 16.7 | 24.6 | 12C |
| SMAP4SMA13CASC | 11.1 | 12.4 | 13.7 | 1 | 1 | 18.2 | 22.5 | 13C |
| SMAP4SMA15CASC | 12.8 | 14.3 | 15.8 | 1 | 1 | 21.2 | 19.3 | 15C |
| SMAP4SMA16CASC | 13.6 | 15.2 | 16.8 | 1 | 1 | 22.5 | 18.2 | 16C |
| SMAP4SMA18CASC | 15.3 | 17.1 | 18.9 | 1 | 1 | 25.5 | 16.1 | 18C |
| SMAP4SMA20CASC | 17.1 | 19 | 21 | 1 | 1 | 27.7 | 14.8 | 20C |
| SMAP4SMA22CASC | 18.8 | 20.9 | 23.1 | 1 | 1 | 30.6 | 13.4 | 22C |
| SMAP4SMA24CASC | 20.5 | 22.8 | 25.2 | 1 | 1 | 33.2 | 12.3 | 24C |
| SMAP4SMA27CASC | 23.1 | 25.7 | 28.4 | 1 | 1 | 37.5 | 10.9 | 27C |
| SMAP4SMA30CASC | 25.6 | 28.5 | 31.5 | 1 | 1 | 41.4 | 9.9 | 30C |
| SMAP4SMA33CASC | 28.2 | 31.4 | 34.7 | 1 | 1 | 45.7 | 9 | 33C |
| SMAP4SMA36CASC | 30.8 | 34.2 | 37.8 | 1 | 1 | 49.9 | 8.2 | 36C |
| SMAP4SMA39CASC | 33.3 | 37.1 | 41 | 1 | 1 | 53.9 | 7.6 | 39C |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

BIDIRECTIONAL TYPE- ELECTRICAL CHARACTERISTICS - Ta = 25°C

Table 5

| Part Code | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current | Marking Code |
|----------------|---------------------------|-------------------|------|--------------|-----------------|--------------------|--------------------|--------------|
| | | V BR @ I T | | | | | | |
| | V RMV | Min | Max | I T | I R @ V RWM | V C @ I PPM | I PPM | |
| V | V | V | mA | µA | V | A | | |
| SMAP4SMA43CASC | 36.8 | 40.9 | 45.2 | 1 | 1 | 59.3 | 6.9 | 43AC |
| SMAP4SMA47CASC | 40.2 | 44.7 | 49.4 | 1 | 1 | 64.8 | 6.3 | 47C |
| SMAP4SMA51CASC | 43.6 | 48.5 | 53.6 | 1 | 1 | 70.1 | 5.8 | 51C |
| SMAP4SMA56CASC | 47.8 | 53.2 | 58.8 | 1 | 1 | 77 | 5.3 | 56C |
| SMAP4SMA62CASC | 53 | 58.9 | 65.1 | 1 | 1 | 85 | 4.8 | 62C |
| SMAP4SMA68CASC | 58.1 | 64.6 | 71.4 | 1 | 1 | 92 | 4.5 | 68C |
| SMAP4SMA75CASC | 64.1 | 71.3 | 78.8 | 1 | 1 | 103 | 4 | 75C |
| SMAP4SMA82CASC | 70.1 | 77.9 | 86.1 | 1 | 1 | 113 | 3.6 | 82C |
| SMAP4SMA91CASC | 77.8 | 86.5 | 95.5 | 1 | 1 | 125 | 3.3 | 91C |
| SMAP4SMA100CAC | 85.5 | 95 | 105 | 1 | 1 | 137 | 3 | 100C |
| SMAP4SMA110CAC | 94 | 105 | 116 | 1 | 1 | 152 | 2.7 | 110C |
| SMAP4SMA120CAC | 102 | 114 | 126 | 1 | 1 | 165 | 2.5 | 120C |
| SMAP4SMA130CAC | 111 | 124 | 137 | 1 | 1 | 179 | 2.3 | 130C |
| SMAP4SMA150CAC | 128 | 143 | 158 | 1 | 1 | 207 | 2 | 150C |
| SMAP4SMA160CAC | 136 | 152 | 168 | 1 | 1 | 219 | 1.9 | 160C |
| SMAP4SMA170CAC | 145 | 162 | 179 | 1 | 1 | 234 | 1.8 | 170C |
| SMAP4SMA180CAC | 154 | 171 | 189 | 1 | 1 | 246 | 1.7 | 180C |
| SMAP4SMA200CAC | 171 | 190 | 210 | 1 | 1 | 274 | 1.5 | 200C |
| SMAP4SMA220CAC | 185 | 209 | 231 | 1 | 1 | 328 | 1.3 | 220C |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

BIDIRECTIONAL TYPE- ELECTRICAL CHARACTERISTICS - Ta = 25°C

Table 6

| Part Code | Reverse Stand-off Voltage | Breakdown Voltage | | Test Current | Reverse Leakage | Max. Clamp Voltage | Peak Pulse Current | Marking Code |
|----------------|---------------------------|-------------------|-------|--------------|-----------------|--------------------|--------------------|--------------|
| | | V BR @ I T | | | | | | |
| | V RMV | Min | Max | I T | I R @ V RWM | V C @ I PPM | I PPM | |
| | V | V | V | mA | µA | V | A | |
| SMAP4SMA250CAC | 214 | 237 | 263 | 1 | 1 | 344 | 1.2 | 250C |
| SMAP4SMA300CAC | 256 | 285 | 315 | 1 | 1 | 414 | 1 | 300C |
| SMAP4SMA350CAC | 300 | 332 | 368 | 1 | 1 | 482 | 0.9 | 350C |
| SMAP4SMA400CAC | 342 | 380 | 420 | 1 | 1 | 548 | 0.8 | 400C |
| SMAP4SMA440CAC | 376 | 418 | 462 | 1 | 1 | 602 | 0.7 | 440C |
| SMAP4SMA480CAC | 408 | 456 | 504 | 1 | 1 | 658 | 0.6 | 480C |
| SMAP4SMA510CAC | 434 | 485 | 535 | 1 | 1 | 698 | 0.6 | 510C |
| SMAP4SMA530CAC | 451 | 503.5 | 556.5 | 1 | 1 | 725 | 0.6 | 530C |
| SMAP4SMA540CAC | 460 | 513 | 567 | 1 | 1 | 740 | 0.5 | 540C |
| SMAP4SMA550CAC | 468 | 522.5 | 577.5 | 1 | 1 | 760 | 0.5 | 550C |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

RELIABILITY

| Number | Experiment Items | Experiment Method And Conditions | Reference Documents |
|--------|------------------------------------|--|---------------------------------|
| 1 | Solder Resistance Test | Test 260°C± 5°C for 10 ± 2 sec. Immerse body into solder 1/16" ± 1/32" | MIL-STD-750D METHOD-2031.2 |
| 2 | Solderability Test | 230°C ±5°C for 5 sec. | MIL-STD-750D METHOD-2026.1 0 |
| 3 | Pull Test | 1 kg in axial lead direction for 10 sec. | MIL-STD-750D METHOD-2036.4 |
| 4 | Bend Test | 0.5Kg Weight Applied To Each Lead, Bending Arcs 90 °C ± 5 °C For 3 Times | MIL-STD-750D METHOD-2036.4 |
| 5 | High Temperature Reverse Bias Test | TA=100°C for 1000 Hours at VR=80% Rated VR | MIL-STD-750D METHOD-1038.4 |
| 6 | Forward Operation Life Test | TA=25°C Rated Average Rectified Current | MIL-STD-750D METHOD-1027.3 |
| 7 | Intermittent Operation Life Test | On state: 5 min with rated IRMS Power Off state: 5 min with Cool Forced Air. On and off for 1000 cycles. | MIL-STD-750D METHOD-1036.3 |
| 8 | Pressure Cooker Test | 15 PSIG, TA=121°C, 4 hours | MIL-S-19500 APPENOIXC |
| 9 | Temperature Cycling Test | -55°C~+125°C; 30 Minutes For Dwelled Time 5 minutes for transferred time. Total: 10 cycles. | MIL-STD-750D METHOD-1051.7 |
| 10 | Thermal Shock Test | 0°C for 5 minutes., 100°C for 5minutes, Total: 10 cycles | MIL-STD-750D METHOD-1056.7 |
| 11 | Forward Surge Test | 8.3ms Single Sale Sine-wave One Surge. | MIL-STD-750D METHOD-4066.4 |
| 12 | Humidity Test | TA=65°C, RH=98% for 1000 hours. | MIL-STD-750D METHOD-1021.3 |
| 13 | High Temperature Storage life Test | 150°C for 1000 Hours | MIL-STD-750D METHOD-1031.5 |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

SUGGESTED REFLOW PROFILE (For Reference Only)



| | | |
|--|----------------------------------|-------------------|
| Profile Feature | | Pb-Free Assembly |
| Average Ramp-up Rate (Ts Max to Tp) | | 3°C/second Max |
| Preheat | Temperature Min (Ts Min.) | 150°C |
| | Temperature Max (Ts Max.) | 200°C |
| | Time (ts Min. to ts Max.) | 60 ~ 180 seconds |
| Time maintained above | Temperature (Tl) | 217°C |
| | Time (tL) | 60 ~ 150 seconds |
| Peak/Classification Temperature (Tp) | | 260 °C |
| Time within 5°C of actual Peak Temperature (tp) | | 20 ~ 40 seconds |
| Ramp-down rate | | 6 °C /Second Max. |
| Time 25 °C to Peak Temperature | | 8 minutes Max. |
| Suggest reflow times | | 3 Times Max. |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

RATINGS AND CHARACTERISTIC CURVES (For Reference Only) - Ta= 25°C Unless Otherwise Specified

Figure 1. Peak Pulse Power Rating Curve



Figure 2. Pulse Derating Curve



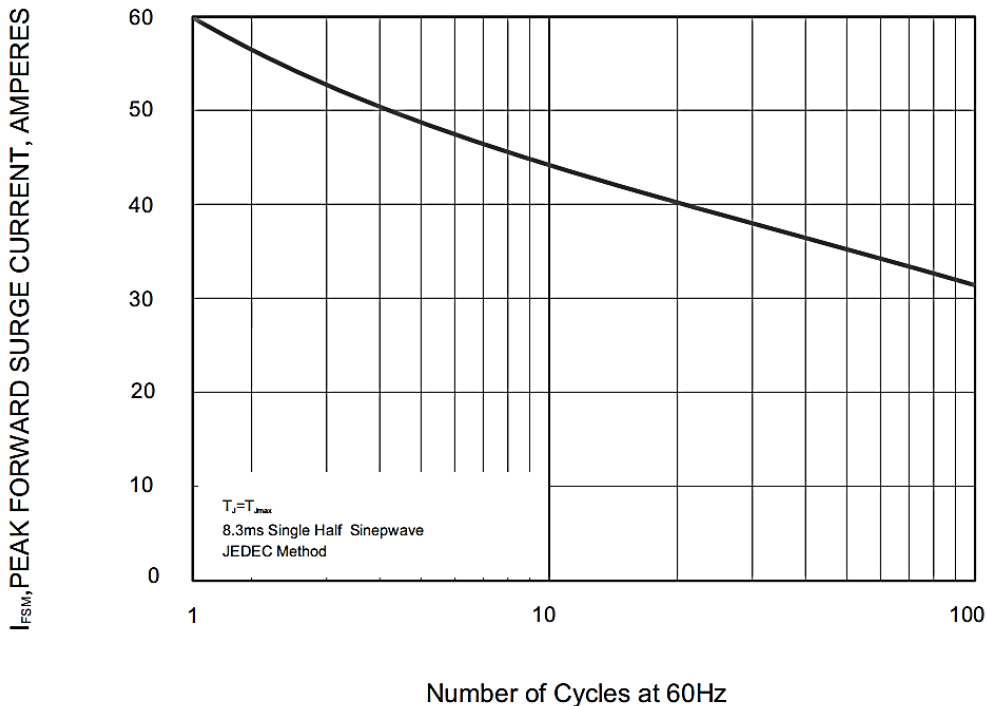
SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

RATINGS AND CHARACTERISTIC CURVES (For Reference Only) - Ta= 25°C Unless Otherwise Specified

Figure 3. Pulse Waveform



Figure 4. Maximum Non-Repetitive Forward Surge Current



SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

TAPE/REEL (Unit: mm)

All Devices are packed in accordance with EIA standard RS-481-A and specifications.



| Item | Symbol | Tolerance | SMA/DO-214AC |
|---------------------------|--------|-----------|--------------|
| Carrier width | A | 0.1 | 2.8 |
| Carrier Length | B | 0.1 | 5.33 |
| Carrier Depth | C | 0.1 | 2.36 |
| Sprocket hole | d | 0.05 | 1.50 |
| 13" Reel outside diameter | D | 2.0 | 330.0 |
| 13" Reel inner diameter | D1 | - | 50.0Min. |
| 7" Reel outside diameter | D | 2.0 | 178.0 |
| 7" Reel inner diameter | D1 | - | 62.0 |
| Feed hole diameter | D2 | 0.5 | 13.00 |
| Sprocket hole position | E | 0.1 | 1.75 |
| Punch hole position | F | 0.1 | 5.50 |
| Punch hole pitch | P | 0.1 | 4.00 |
| Sprocket hole pitch | P0 | 0.1 | 4.00 |
| Embossment center | P1 | 0.1 | 2.0 |
| Overall tape thickness | T | 0.1 | 0.28 |
| Tape width | W | 0.3 | 12.00 |
| Reel width | W1 | 1.0 | 18.0 |

SMD TRANSIENT VOLTAGE SUPPRESSORS DIODES SMA SERIES

PACKAGE For Reference Only

| Case Code | SMA |
|-----------|-----------|
| Reel Size | 13" |
| Reel Size | 330 mm |
| SPQ/Reel | 5000 pcs |
| Qty. /Box | 10000 pcs |
| G.W/Box | / |

GENERAL RETURN/REFUND POLICY

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