



## 3.DATA SHEET

# P4SMAJ SERIES

**SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR**  
**VOLTAGE - 5.0 to 220 Volts 400 Watt Peak Power Pulse**

SMA / DO-214AC

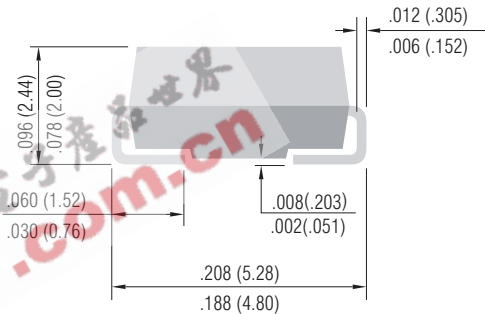
Unit: inch ( mm )

### FEATURES

- For surface mounted applications in order to optimize board space.
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Excellent clamping capability
- Low inductance
- Fast response time: typically less than 1.0 ps from 0 volts to BV min
- Typical IR less than 1μA above 10V
- High temperature soldering : 250°C/10 seconds at terminals.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O

### MECHANICAL DATA

Case: JEDEC DO-214AC low profile molded plastic  
Terminals: Solder leads, solderable per MIL-STD-750, Method 2026  
Polarity: Indicated by cathode band except Bi-directional types.  
Standard Packaging: 12mm tape per(EIA-481)  
Weight: 0.002 ounces, 0.064 gram



### MAXIMUM RATINGS AND CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.  
For Capacitive load derate current by 20%.

| RATING  | SYMBOL         | VALUE       | UNITS |
|---|----------------|-------------|-------|
| Peak Power Dissipation at $T_A=25^\circ\text{C}$ , $T_P=1\text{ms}$ (Note 1,2,5)Fig.1 | $P_{PPM}$      | Minimum 400 | Watts |
| Peak Forward Surge Current, per Figure 5(Note 3)                                      | $I_{FSM}$      | 40.0        | Amps  |
| Peak Pulse Current Current on 10/1000μs waveform(Note 1,2,5)Fig.2                     | $I_{PPM}$      | See Table 1 | Amps  |
| Steady State Power Dissipation(Note 4)  | $P_{M(AV)}$    | 1.0         | Watts |
| Operating and Storage Temperature Range   | $T_J, T_{STG}$ | -55 to +150 | °C    |

#### NOTES:

- 1.Non-repetitive current pulse, per Fig. 3 and derated above  $T_A=25^\circ\text{C}$ per Fig. 2.
- 2.Mounted on 5.0mm<sup>2</sup> Copper pads to each terminal.
- 3.8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.
- 4.lead temperature at 75°C= $T_L$ .
- 5.Peak pluse power waveformis 10/1000μS.



| Part Number                              |             | Marking Code |    | Reverse Stand-off Voltage | Breakdown Voltage                |                                   | Test Current | Reverse Leakage                  |                 | Max. Clamp Voltage | Peak Pulse Current | Package      |
|--|-------------|--------------|----|---------------------------|----------------------------------|-----------------------------------|--------------|----------------------------------|-----------------|--------------------|--------------------|--------------|
|  |             |              |    |                           | V <sub>BR</sub> @ I <sub>T</sub> | I <sub>R</sub> @ V <sub>RWM</sub> |              | V <sub>C</sub> @ I <sub>PP</sub> | I <sub>PP</sub> |                    |                    |              |
|  |             |              |    | V <sub>RWM</sub>          |                                  |                                   | Min.         |                                  |                 | Max.               | UNI                |              |
| UNI                                      | BI          | UNI          | BI | V                         | V                                | V                                 | mA           | μA                               | μA              | V                  | A                  |              |
| <b>400W Transient Voltage Suppressor</b> |             |              |    |                           |                                  |                                   |              |                                  |                 |                    |                    |              |
| P4SMAJ5.0                                | P4SMAJ5.0C  | HD           | TD | 5.0                       | 6.40                             | 7.55                              | 10           | 800                              | 1600            | 9.6                | 41.6               | SMA/DO-214AC |
| P4SMAJ5.0A                               | P4SMAJ5.0CA | HE           | TE | 5.0                       | 6.40                             | 7.25                              | 10           | 800                              | 1600            | 9.2                | 43.5               | SMA/DO-214AC |
| P4SMAJ6.0                                | P4SMAJ6.0C  | HF           | TF | 6.0                       | 6.67                             | 8.45                              | 10           | 800                              | 1600            | 11.4               | 35.1               | SMA/DO-214AC |
| P4SMAJ6.0A                               | P4SMAJ6.0CA | HG           | TG | 6.0                       | 6.67                             | 7.67                              | 10           | 800                              | 1600            | S10.3              | 38.8               | SMA/DO-214AC |
| P4SMAJ6.5                                | P4SMAJ6.5C  | HH           | TH | 6.5                       | 7.22                             | 9.14                              | 10           | 500                              | 1000            | 12.3               | 32.5               | SMA/DO-214AC |
| P4SMAJ6.5A                               | P4SMAJ6.5CA | HK           | TK | 6.5                       | 7.22                             | 8.30                              | 10           | 500                              | 1000            | 11.2               | 35.7               | SMA/DO-214AC |
| P4SMAJ7.0                                | P4SMAJ7.0C  | HL           | TL | 7.0                       | 7.78                             | 9.86                              | 10           | 200                              | 400             | 13.3               | 30.1               | SMA/DO-214AC |
| P4SMAJ7.0A                               | P4SMAJ7.0CA | HM           | TM | 7.0                       | 7.78                             | 8.95                              | 10           | 200                              | 400             | 12.0               | 33.3               | SMA/DO-214AC |
| P4SMAJ7.5                                | P4SMAJ7.5C  | HN           | TN | 7.5                       | 8.33                             | 10.67                             | 1.0          | 100                              | 200             | 14.3               | 28.0               | SMA/DO-214AC |
| P4SMAJ7.5A                               | P4SMAJ7.5CA | HP           | TP | 7.5                       | 8.33                             | 9.58                              | 1.0          | 100                              | 200             | 12.9               | 31.0               | SMA/DO-214AC |
| P4SMAJ8.0                                | P4SMAJ8.0C  | HQ           | TQ | 8.0                       | 8.89                             | 11.30                             | 1.0          | 50                               | 100             | 15.0               | 26.5               | SMA/DO-214AC |
| P4SMAJ8.0A                               | P4SMAJ8.0CA | HR           | TR | 8.0                       | 8.89                             | 10.23                             | 1.0          | 50                               | 100             | 13.6               | 29.4               | SMA/DO-214AC |
| P4SMAJ8.5                                | P4SMAJ8.5C  | HS           | TS | 8.5                       | 9.44                             | 11.92                             | 1.0          | 10                               | 20              | 15.9               | 25.1               | SMA/DO-214AC |
| P4SMAJ8.5A                               | P4SMAJ8.5CA | HT           | TT | 8.5                       | 9.44                             | 10.82                             | 1.0          | 10                               | 20              | 14.4               | 27.7               | SMA/DO-214AC |
| P4SMAJ9.0                                | P4SMAJ9.0C  | HU           | TU | 9.0                       | 10.0                             | 12.6                              | 1.0          | 5                                | 10              | 16.9               | 23.6               | SMA/DO-214AC |
| P4SMAJ9.0A                               | P4SMAJ9.0CA | HV           | TV | 9.0                       | 10.0                             | 11.5                              | 1.0          | 5                                | 10              | 15.4               | 26.0               | SMA/DO-214AC |
| P4SMAJ10                                 | P4SMAJ10C   | HW           | TW | 10                        | 11.1                             | 14.1                              | 1.0          | 5                                | 5               | 18.8               | 21.2               | SMA/DO-214AC |
| P4SMAJ10A                                | P4SMAJ10CA  | HX           | TX | 10                        | 11.1                             | 12.8                              | 1.0          | 5                                | 5               | 17.0               | 23.5               | SMA/DO-214AC |
| P4SMAJ11                                 | P4SMAJ11C   | HY           | TY | 11                        | 12.2                             | 15.4                              | 1.0          | 5                                | 5               | 20.1               | 20.0               | SMA/DO-214AC |
| P4SMAJ11A                                | P4SMAJ11CA  | HZ           | TZ | 11                        | 12.2                             | 14.0                              | 1.0          | 5                                | 5               | 18.2               | 22.0               | SMA/DO-214AC |
| P4SMAJ12                                 | P4SMAJ12C   | ID           | UD | 12                        | 13.3                             | 16.9                              | 1.0          | 5                                | 5               | 22.0               | 18.1               | SMA/DO-214AC |
| P4SMAJ12A                                | P4SMAJ12CA  | IE           | UE | 12                        | 13.3                             | 15.3                              | 1.0          | 5                                | 5               | 19.9               | 20.1               | SMA/DO-214AC |
| P4SMAJ13                                 | P4SMAJ13C   | IF           | UF | 13                        | 14.4                             | 18.2                              | 1.0          | 5                                | 5               | 23.8               | 16.8               | SMA/DO-214AC |
| P4SMAJ13A                                | P4SMAJ13CA  | IG           | UG | 13                        | 14.4                             | 16.5                              | 1.0          | 5                                | 5               | 21.5               | 18.6               | SMA/DO-214AC |
| P4SMAJ14                                 | P4SMAJ14C   | IH           | UH | 14                        | 15.6                             | 19.8                              | 1.0          | 5                                | 5               | 25.8               | 15.5               | SMA/DO-214AC |
| P4SMAJ14A                                | P4SMAJ14CA  | IK           | UK | 14                        | 15.6                             | 17.9                              | 1.0          | 5                                | 5               | 23.2               | 17.2               | SMA/DO-214AC |
| P4SMAJ15                                 | P4SMAJ15C   | IL           | UL | 15                        | 16.7                             | 21.1                              | 1.0          | 5                                | 5               | 26.9               | 14.8               | SMA/DO-214AC |
| P4SMAJ15A                                | P4SMAJ15CA  | IM           | UM | 15                        | 16.7                             | 19.2                              | 1.0          | 5                                | 5               | 24.4               | 16.4               | SMA/DO-214AC |
| P4SMAJ16                                 | P4SMAJ16C   | IN           | UN | 16                        | 17.8                             | 22.6                              | 1.0          | 5                                | 5               | 28.8               | 13.8               | SMA/DO-214AC |
| P4SMAJ16A                                | P4SMAJ16CA  | IP           | UP | 16                        | 17.8                             | 20.5                              | 1.0          | 5                                | 5               | 26.0               | 15.3               | SMA/DO-214AC |
| P4SMAJ17                                 | P4SMAJ17C   | IQ           | UQ | 17                        | 18.9                             | 23.9                              | 1.0          | 5                                | 5               | 30.5               | 13.1               | SMA/DO-214AC |
| P4SMAJ17A                                | P4SMAJ17CA  | IR           | UR | 17                        | 18.9                             | 21.7                              | 1.0          | 5                                | 5               | 27.6               | 14.5               | SMA/DO-214AC |
| P4SMAJ18                                 | P4SMAJ18C   | IS           | US | 18                        | 20.0                             | 25.3                              | 1.0          | 5                                | 5               | 32.2               | 12.4               | SMA/DO-214AC |
| P4SMAJ18A                                | P4SMAJ18CA  | IT           | UT | 18                        | 20.0                             | 23.3                              | 1.0          | 5                                | 5               | 29.2               | 13.7               | SMA/DO-214AC |
| P4SMAJ20                                 | P4SMAJ20C   | IU           | UU | 20                        | 22.2                             | 28.1                              | 1.0          | 5                                | 5               | 35.8               | 11.1               | SMA/DO-214AC |
| P4SMAJ20A                                | P4SMAJ20CA  | IV           | UV | 20                        | 22.2                             | 25.5                              | 1.0          | 5                                | 5               | 32.4               | 12.3               | SMA/DO-214AC |
| P4SMAJ22                                 | P4SMAJ22C   | IW           | UW | 22                        | 24.4                             | 30.9                              | 1.0          | 5                                | 5               | 39.4               | 10.1               | SMA/DO-214AC |
| P4SMAJ22A                                | P4SMAJ22CA  | IX           | UX | 22                        | 24.4                             | 28.0                              | 1.0          | 5                                | 5               | 35.5               | 11.2               | SMA/DO-214AC |
| P4SMAJ24                                 | P4SMAJ24C   | IY           | UY | 24                        | 26.7                             | 33.8                              | 1.0          | 5                                | 5               | 43.0               | 9.3                | SMA/DO-214AC |
| P4SMAJ24A                                | P4SMAJ24CA  | IZ           | UZ | 24                        | 26.7                             | 30.7                              | 1.0          | 5                                | 5               | 38.9               | 10.3               | SMA/DO-214AC |
| P4SMAJ26                                 | P4SMAJ26C   | JD           | VD | 26                        | 28.9                             | 36.6                              | 1.0          | 5                                | 5               | 46.6               | 8.6                | SMA/DO-214AC |
| P4SMAJ26A                                | P4SMAJ26CA  | JE           | VE | 26                        | 28.9                             | 33.2                              | 1.0          | 5                                | 5               | 42.1               | 9.5                | SMA/DO-214AC |
| P4SMAJ28                                 | P4SMAJ28C   | JF           | VF | 28                        | 31.1                             | 39.4                              | 1.0          | 5                                | 5               | 50.0               | 8.0                | SMA/DO-214AC |
| P4SMAJ28A                                | P4SMAJ28CA  | JG           | VG | 28                        | 31.1                             | 35.8                              | 1.0          | 5                                | 5               | 45.4               | 8.8                | SMA/DO-214AC |
| P4SMAJ30                                 | P4SMAJ30C   | JH           | VH | 30                        | 33.3                             | 42.2                              | 1.0          | 5                                | 5               | 53.5               | 7.5                | SMA/DO-214AC |
| P4SMAJ30A                                | P4SMAJ30CA  | JK           | VK | 30                        | 33.3                             | 38.3                              | 1.0          | 5                                | 5               | 48.4               | 8.3                | SMA/DO-214AC |
| P4SMAJ33                                 | P4SMAJ33C   | JL           | VL | 33                        | 36.7                             | 46.5                              | 1.0          | 5                                | 5               | 59.0               | 6.8                | SMA/DO-214AC |
| P4SMAJ33A                                | P4SMAJ33CA  | JM           | VM | 33                        | 36.7                             | 42.2                              | 1.0          | 5                                | 5               | 53.3               | 7.5                | SMA/DO-214AC |
| P4SMAJ36                                 | P4SMAJ36C   | JN           | VN | 36                        | 40.0                             | 50.7                              | 1.0          | 5                                | 5               | 64.3               | 6.2                | SMA/DO-214AC |
| P4SMAJ36A                                | P4SMAJ36CA  | JP           | VP | 36                        | 40.0                             | 46.0                              | 1.0          | 5                                | 5               | 58.1               | 6.9                | SMA/DO-214AC |
| P4SMAJ40                                 | P4SMAJ40C   | JQ           | VQ | 40                        | 44.4                             | 56.3                              | 1.0          | 5                                | 5               | 71.4               | 5.6                | SMA/DO-214AC |
| P4SMAJ40A                                | P4SMAJ40CA  | JR           | VR | 40                        | 44.4                             | 51.1                              | 1.0          | 5                                | 5               | 64.5               | 6.2                | SMA/DO-214AC |



| Part Number   |             | Marking Code |    | Reverse Stand-off Voltage | Breakdown Voltage                |                | Test Current | Reverse Leakage                   |     | Max. Clamp Voltage | Peak Pulse Current               | Package      |
|---|-------------|--------------|----|---------------------------|----------------------------------|----------------|--------------|-----------------------------------|-----|--------------------|----------------------------------|--------------|
|   |             |              |    |                           | V <sub>BR</sub> @ I <sub>T</sub> | I <sub>T</sub> |              | I <sub>R</sub> @ V <sub>RWM</sub> |     |                    |                                  |              |
|   |             |              |    | V <sub>RWM</sub>          |                                  |                | Min.         | Max.                              | UNI | BI                 | V <sub>C</sub> @ I <sub>PP</sub> |              |
| UNI   | BI          | UNI          | BI | V                         | V                                | V              | mA           | μA                                | μA  | V                  | A                                |              |
| <b>400W Transient Voltage Suppressor –continued</b> |             |              |    |                           |                                  |                |              |                                   |     |                    |                                  |              |
| P4SMAJ43  | P4SMAJ43C   | JS           | VS | 43                        | 47.8                             | 60.5           | 1.0          | 5                                 | 5   | 76.7               | 5.2                              | SMA/DO-214AC |
| P4SMAJ43A   | P4SMAJ43CA  | JT           | VT | 43                        | 47.8                             | 54.9           | 1.0          | 5                                 | 5   | 69.4               | 5.7                              | SMA/DO-214AC |
| P4SMAJ45  | P4SMAJ45C   | JU           | VU | 45                        | 50.0                             | 63.3           | 1.0          | 5                                 | 5   | 80.3               | 5.0                              | SMA/DO-214AC |
| P4SMAJ45A   | P4SMAJ45CA  | JV           | VV | 45                        | 50.0                             | 57.5           | 1.0          | 5                                 | 5   | 72.7               | 5.5                              | SMA/DO-214AC |
| P4SMAJ48  | P4SMAJ48C   | JW           | VW | 48                        | 53.3                             | 67.5           | 1.0          | 5                                 | 5   | 85.5               | 4.7                              | SMA/DO-214AC |
| P4SMAJ48A   | P4SMAJ48CA  | JX           | VX | 48                        | 53.3                             | 61.3           | 1.0          | 5                                 | 5   | 77.4               | 5.2                              | SMA/DO-214AC |
| P4SMAJ51  | P4SMAJ51C   | JY           | VY | 51                        | 56.7                             | 71.8           | 1.0          | 5                                 | 5   | 91.1               | 4.4                              | SMA/DO-214AC |
| P4SMAJ51A   | P4SMAJ51CA  | JZ           | VZ | 51                        | 56.7                             | 65.2           | 1.0          | 5                                 | 5   | 82.4               | 4.9                              | SMA/DO-214AC |
| P4SMAJ54  | P4SMAJ54C   | RD           | WD | 54                        | 60.0                             | 76.0           | 1.0          | 5                                 | 5   | 96.3               | 4.2                              | SMA/DO-214AC |
| P4SMAJ54A   | P4SMAJ54CA  | RE           | WE | 54                        | 60.0                             | 69.0           | 1.0          | 5                                 | 5   | 87.1               | 4.6                              | SMA/DO-214AC |
| P4SMAJ58  | P4SMAJ58C   | RF           | WF | 58                        | 64.4                             | 81.6           | 1.0          | 5                                 | 5   | 103                | 3.9                              | SMA/DO-214AC |
| P4SMAJ58A   | P4SMAJ58CA  | RG           | WG | 58                        | 64.4                             | 74.1           | 1.0          | 5                                 | 5   | 93.6               | 4.3                              | SMA/DO-214AC |
| P4SMAJ60  | P4SMAJ60C   | RH           | WH | 60                        | 66.7                             | 84.5           | 1.0          | 5                                 | 5   | 107                | 3.7                              | SMA/DO-214AC |
| P4SMAJ60A   | P4SMAJ60CA  | RK           | WK | 60                        | 66.7                             | 76.7           | 1.0          | 5                                 | 5   | 96.8               | 4.1                              | SMA/DO-214AC |
| P4SMAJ64  | P4SMAJ64C   | RL           | WL | 64                        | 71.1                             | 90.1           | 1.0          | 5                                 | 5   | 114                | 3.5                              | SMA/DO-214AC |
| P4SMAJ64A   | P4SMAJ64CA  | RM           | WM | 64                        | 71.1                             | 81.8           | 1.0          | 5                                 | 5   | 103                | 3.9                              | SMA/DO-214AC |
| P4SMAJ70  | P4SMAJ70C   | RN           | WN | 70                        | 77.8                             | 98.6           | 1.0          | 5                                 | 5   | 125                | 3.2                              | SMA/DO-214AC |
| P4SMAJ70A   | P4SMAJ70CA  | RP           | WP | 70                        | 77.8                             | 89.5           | 1.0          | 5                                 | 5   | 113                | 3.5                              | SMA/DO-214AC |
| P4SMAJ75  | P4SMAJ75C   | RQ           | WQ | 75                        | 83.3                             | 105.7          | 1.0          | 5                                 | 5   | 134                | 3.0                              | SMA/DO-214AC |
| P4SMAJ75A   | P4SMAJ75CA  | RR           | WR | 75                        | 83.3                             | 95.8           | 1.0          | 5                                 | 5   | 121                | 3.3                              | SMA/DO-214AC |
| P4SMAJ78  | P4SMAJ78C   | RS           | WS | 78                        | 86.7                             | 109.8          | 1.0          | 5                                 | 5   | 139                | 2.9                              | SMA/DO-214AC |
| P4SMAJ78A   | P4SMAJ78CA  | RT           | WT | 78                        | 86.7                             | 99.7           | 1.0          | 5                                 | 5   | 126                | 2.2                              | SMA/DO-214AC |
| P4SMAJ85  | P4SMAJ85C   | RU           | WU | 85                        | 94.4                             | 119.2          | 1.0          | 5                                 | 5   | 151                | 2.6                              | SMA/DO-214AC |
| P4SMAJ85A   | P4SMAJ85CA  | RV           | WV | 85                        | 94.4                             | 108.2          | 1.0          | 5                                 | 5   | 137                | 2.9                              | SMA/DO-214AC |
| P4SMAJ90  | P4SMAJ90C   | RW           | WW | 90                        | 100                              | 126.5          | 1.0          | 5                                 | 5   | 160                | 2.5                              | SMA/DO-214AC |
| P4SMAJ90A   | P4SMAJ90CA  | RX           | WX | 90                        | 100                              | 115.5          | 1.0          | 5                                 | 5   | 146                | 2.7                              | SMA/DO-214AC |
| P4SMAJ100   | P4SMAJ100C  | RY           | WY | 100                       | 111                              | 141.0          | 1.0          | 5                                 | 5   | 179                | 2.2                              | SMA/DO-214AC |
| P4SMAJ100A  | P4SMAJ100CA | RZ           | WZ | 100                       | 111                              | 128.0          | 1.0          | 5                                 | 5   | 162                | 2.5                              | SMA/DO-214AC |
| P4SMAJ110   | P4SMAJ110C  | SD           | XD | 110                       | 122                              | 154.5          | 1.0          | 5                                 | 5   | 196                | 2.0                              | SMA/DO-214AC |
| P4SMAJ110A  | P4SMAJ110CA | SE           | XE | 110                       | 122                              | 140.5          | 1.0          | 5                                 | 5   | 177                | 2.3                              | SMA/DO-214AC |
| P4SMAJ120   | P4SMAJ120C  | SF           | XF | 120                       | 133                              | 169.0          | 1.0          | 5                                 | 5   | 214                | 1.9                              | SMA/DO-214AC |
| P4SMAJ120A  | P4SMAJ120CA | SG           | XG | 120                       | 133                              | 153.0          | 1.0          | 5                                 | 5   | 193                | 2.0                              | SMA/DO-214AC |
| P4SMAJ130   | P4SMAJ130C  | SH           | XH | 130                       | 144                              | 182.5          | 1.0          | 5                                 | 5   | 231                | 1.7                              | SMA/DO-214AC |
| P4SMAJ130A  | P4SMAJ130CA | SK           | XK | 130                       | 144                              | 165.5          | 1.0          | 5                                 | 5   | 209                | 1.9                              | SMA/DO-214AC |
| P4SMAJ150   | P4SMAJ150C  | SL           | XL | 150                       | 167                              | 211.5          | 1.0          | 5                                 | 5   | 268                | 1.5                              | SMA/DO-214AC |
| P4SMAJ150A  | P4SMAJ150CA | SM           | XM | 150                       | 167                              | 192.5          | 1.0          | 5                                 | 5   | 243                | 1.6                              | SMA/DO-214AC |
| P4SMAJ160   | P4SMAJ160C  | SN           | XN | 160                       | 178                              | 226.0          | 1.0          | 5                                 | 5   | 287                | 1.4                              | SMA/DO-214AC |
| P4SMAJ160A  | P4SMAJ160CA | SP           | XP | 160                       | 178                              | 205.0          | 1.0          | 5                                 | 5   | 259                | 1.5                              | SMA/DO-214AC |
| P4SMAJ170   | P4SMAJ170C  | SQ           | XQ | 170                       | 189                              | 239.5          | 1.0          | 5                                 | 5   | 304                | 1.3                              | SMA/DO-214AC |
| P4SMAJ170A  | P4SMAJ170CA | SR           | XR | 170                       | 189                              | 217.5          | 1.0          | 5                                 | 5   | 275                | 1.4                              | SMA/DO-214AC |
| P4SMAJ180   | P4SMAJ180C  | SS           | XS | 180                       | 198                              | 253.8          | 1.0          | 5                                 | 5   | 322                | 1.2                              | SMA/DO-214AC |
| P4SMAJ180A  | P4SMAJ180CA | ST           | XT | 180                       | 198                              | 230.4          | 1.0          | 5                                 | 5   | 292                | 1.3                              | SMA/DO-214AC |
| P4SMAJ190   | P4SMAJ190C  | SU           | XU | 190                       | 209                              | 267.9          | 1.0          | 5                                 | 5   | 340                | 1.2                              | SMA/DO-214AC |
| P4SMAJ190A  | P4SMAJ190CA | SV           | XV | 190                       | 209                              | 243.2          | 1.0          | 5                                 | 5   | 308                | 1.3                              | SMA/DO-214AC |
| P4SMAJ200   | P4SMAJ200C  | SW           | XW | 200                       | 220                              | 282.0          | 1.0          | 5                                 | 5   | 358                | 1.1                              | SMA/DO-214AC |
| P4SMAJ200A  | P4SMAJ200CA | SX           | XX | 200                       | 220                              | 256.0          | 1.0          | 5                                 | 5   | 324                | 1.2                              | SMA/DO-214AC |
| P4SMAJ210   | P4SMAJ210C  | SY           | XY | 210                       | 231                              | 296.1          | 1.0          | 5                                 | 5   | 376                | 1.1                              | SMA/DO-214AC |
| P4SMAJ210A  | P4SMAJ210CA | SZ           | XZ | 210                       | 231                              | 268.8          | 1.0          | 5                                 | 5   | 340                | 1.2                              | SMA/DO-214AC |
| P4SMAJ220   | P4SMAJ220C  | GD           | ZD | 220                       | 242                              | 310.2          | 1.0          | 5                                 | 5   | 394                | 1.0                              | SMA/DO-214AC |
| P4SMAJ220A  | P4SMAJ220CA | GE           | ZE | 220                       | 242                              | 281.6          | 1.0          | 5                                 | 5   | 356                | 1.1                              | SMA/DO-214AC |



td, PULSE WIDTH, SEC  
**FIGURE 1-PEAK PULSE POWER RATING CURVE**



TA, AMBIENT TEMPERATURE, °C  
**FIGURE 2 DERATING CURVE**



**FIGURE 3-PULSE WAVEFORM**



V(BR), BREAKDOWN VOLTAGE, VOLTS  
**FIGURE 4-TYPICAL CAPACITANCE**



TL, LEAD TEMPERATURE, °C  
**FIG. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**