

SAC SERIES

V_{BR} : 5.0 - 50 Volts

PPK : 500 Watts

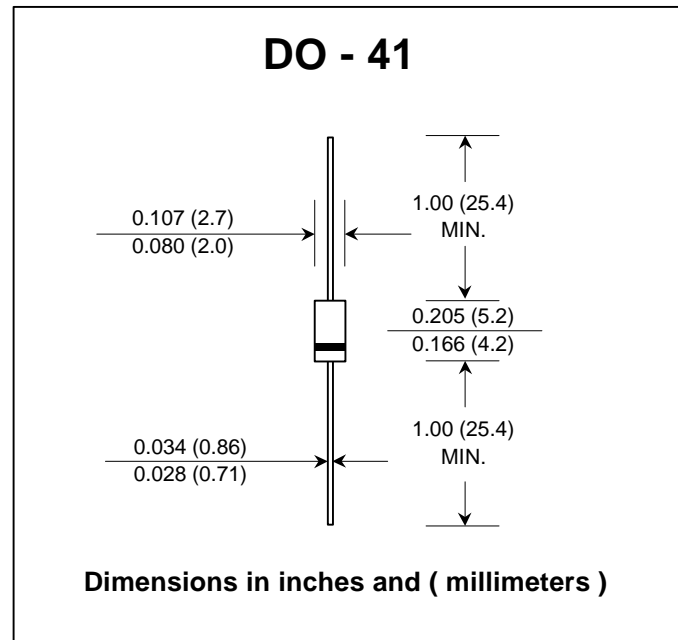
FEATURES :

- * 500W Peak Pulse Surge reverse capability on 10/1000 μ s waveform
- * Excellent clamping capability
- * Low incremental surge resistance
- * Fast response time : typically less than 1.0 ns from 0 volts to BV
- * **Pb / RoHS Free**

MECHANICAL DATA

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.34 gram

LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR



MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

| Rating | Symbol | Value | Unit |
|---|-----------------------------------|---------------|------|
| Peak Pulse Power Dissipation on 10/1000 μ s waveform (Note 1, Figure 1) | PPPM | Minimum 500 | W |
| Steady State Power Dissipation at T _L = 75 °C Lead Lengths 0.375", (9.5mm) | P _D | 1.0 | W |
| Peak Forward Surge Current on 10/1000 μ s Waveform (Fig. 3, Note 1) | IFSM | See Table 1. | A |
| Operating and Storage Temperature Range | T _J , T _{STG} | - 65 to + 175 | °C |

Note :

(1) Non-repetitive Current pulse, per Fig. 5 and derated above T_a = 25 °C per Fig. 2

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

| TYPE NUMBER | Breakdown Voltage @ I_t | | Reverse Stand-off Voltage V_{RWM} (V) | Maximum Reverse Leakage @ V_{RWM} I_R (μ A) | Maximum Clamping Voltage @ $I_{RSM}=5A$ V_{RSM} (V) | Maximum Reverse Current I_{RSM} (A) | Maximum Junction Capacitance @ 0 Volt (pF) | Working Inverse Blocking Voltage V_{WIB} (V) | Max. Inverse Blocking Current @ V_{WIB} I_{IB} (mA) | Peak Inverse Blocking Voltage V_{PIB} (V) |
|-------------|---------------------------|-------|---|--|---|---|---|--|---|---|
| | V_{BR} (V) | I_t | | | | | | | | |
| | Min. | (mA) | | | | | | | | |
| SAC5.0 | 7.6 | 1.0 | 5.0 | 300 | 10.0 | 44 | 50 | 75 | 1.0 | 100 |
| SAC6.0 | 7.9 | 1.0 | 6.0 | 300 | 11.2 | 41 | 50 | 75 | 1.0 | 100 |
| SAC7.0 | 8.3 | 1.0 | 7.0 | 300 | 12.6 | 38 | 50 | 75 | 1.0 | 100 |
| SAC8.0 | 8.9 | 1.0 | 8.0 | 100 | 13.4 | 36 | 50 | 75 | 1.0 | 100 |
| SAC8.5 | 9.4 | 1.0 | 8.5 | 50 | 14.0 | 34 | 50 | 75 | 1.0 | 100 |
| SAC10 | 11.1 | 1.0 | 10 | 5.0 | 16.3 | 29 | 50 | 75 | 1.0 | 100 |
| SAC12 | 13.3 | 1.0 | 12 | 5.0 | 19.0 | 25 | 50 | 75 | 1.0 | 100 |
| SAC15 | 16.7 | 1.0 | 15 | 5.0 | 23.6 | 20 | 50 | 75 | 1.0 | 100 |
| SAC18 | 20.0 | 1.0 | 18 | 5.0 | 28.8 | 15 | 50 | 75 | 1.0 | 100 |
| SAC22 | 24.4 | 1.0 | 22 | 5.0 | 35.4 | 14 | 50 | 75 | 1.0 | 100 |
| SAC26 | 28.9 | 1.0 | 26 | 5.0 | 42.3 | 11.1 | 50 | 75 | 1.0 | 100 |
| SAC30 | 33.3 | 1.0 | 30 | 5.0 | 48.6 | 10 | 50 | 75 | 1.0 | 100 |
| SAC36 | 40.0 | 1.0 | 36 | 5.0 | 60.0 | 8.6 | 50 | 75 | 1.0 | 100 |
| SAC45 | 50.0 | 1.0 | 45 | 5.0 | 77.0 | 6.8 | 50 | 150 | 1.0 | 200 |
| SAC50 | 55.5 | 1.0 | 50 | 5.0 | 88.0 | 5.8 | 50 | 150 | 1.0 | 200 |

FIG.1 - PEAK PULSE POWER RATING CURVE

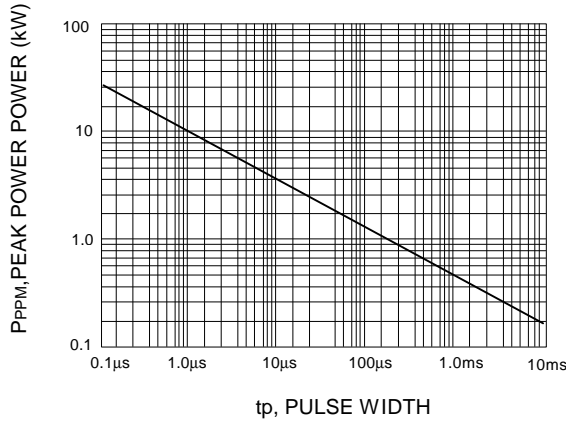


FIG.2 - PULSE DERATING CURVE

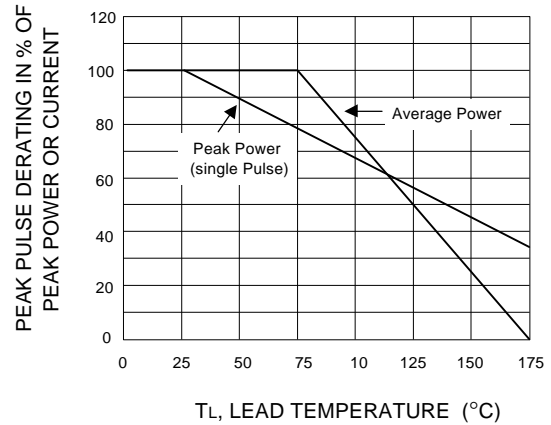


FIG.3 - PULSE WAVEFORM

