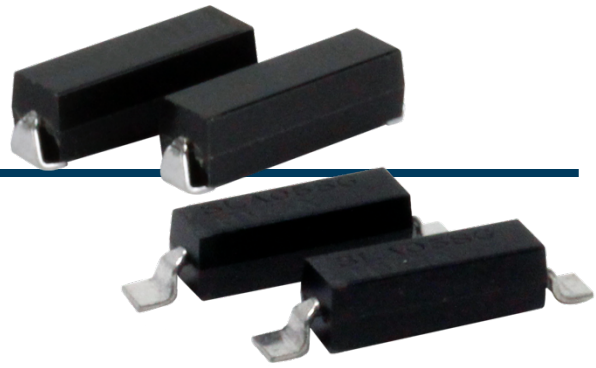
# SLA-M SERIES

5 to 25kV, 150 to 650mA, 100nS
Surface Mount Diodes



## Features

- Long Surface Mount Package
- J Lead or Gullwing Package Option
- Available in Cut Tape and 1000 Piece Reels
- Molded Plastic Body, ANSI/UL94 V-0 Rated Material

## Specifications[1]

| Part Number | $V_{RRM}$ V | $I_{FAVM1}$[2] mA | $I_{FAVM2}$[2] mA | $I_{FAVM3}$[2] mA | $V_F$ V | $I_R$ µA | $I_{FSM}$ A | $C_J$ pF | $T_{RR}$ nS | $R_{\theta JL}$ °C/W | $R_{\theta JC}$ °C/W |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **J Lead Subseries (Figure 1)** | | | | | | | | | | | |
| **SLA05M** | 5000 | 650 | 330 | 300 | 12 | 2 | 15 | 6.5 | 100 | 16 | 30 |
| **SLA06M** | 6000 | 575 | 300 | 270 | 13 | 2 | 15 | 5.0 | 100 | 16 | 30 |
| **SLA08M** | 8000 | 550 | 280 | 250 | 16 | 2 | 15 | 4.5 | 100 | 16 | 30 |
| **SLA10M** | 10000 | 500 | 250 | 230 | 20 | 2 | 15 | 3.5 | 100 | 16 | 30 |
| **SLA12M** | 12000 | 475 | 200 | 190 | 24 | 2 | 15 | 2.7 | 100 | 16 | 30 |
| **SLA15M** | 15000 | 250 | 85 | 100 | 27 | 2 | 15 | 2.1 | 100 | 16 | 30 |
| **SLA20M** | 20000 | 200 | 70 | 85 | 35 | 2 | 15 | 1.8 | 100 | 16 | 30 |
| **SLA25M** | 25000 | 150 | 60 | 75 | 40 | 2 | 15 | 1.5 | 100 | 16 | 30 |
| **Gullwing Subseries (Figure 2)** | | | | | | | | | | | |
| **SLA05MG** | 5000 | 650 | 330 | 300 | 12 | 2 | 15 | 6.5 | 100 | 16 | 30 |
| **SLA06MG** | 6000 | 575 | 300 | 270 | 13 | 2 | 15 | 5.0 | 100 | 16 | 30 |
| **SLA08MG** | 8000 | 550 | 280 | 250 | 16 | 2 | 15 | 4.5 | 100 | 16 | 30 |
| **SLA10MG** | 10000 | 500 | 250 | 230 | 20 | 2 | 15 | 3.5 | 100 | 16 | 30 |
| **SLA12MG** | 12000 | 475 | 200 | 190 | 24 | 2 | 15 | 2.7 | 100 | 16 | 30 |
| **SLA15MG** | 15000 | 250 | 85 | 100 | 27 | 2 | 15 | 2.1 | 100 | 16 | 30 |
| **SLA20MG** | 20000 | 200 | 70 | 85 | 35 | 2 | 15 | 1.8 | 100 | 16 | 30 |
| **SLA25MG** | 25000 | 150 | 60 | 75 | 40 | 2 | 15 | 1.5 | 100 | 16 | 30 |

| Temperature °C | |
|---|---|
| **Storage Temperature** | -55 to 175 |
| **Operating Temperature** | -55 to 150 *(SLA05M to SLA12M, SLA05MG to SLA12MG)*<br>-55 to 125 *(SLA15M to SLA25M, SLA15MG to SLA25MG)* |
| **Maximum Junction Temperature** | 150 *(SLA05M to SLA12M, SLA05MG to SLA12MG)*<br>125 *(SLA15M to SLA25M, SLA15MG to SLA25MG)* |

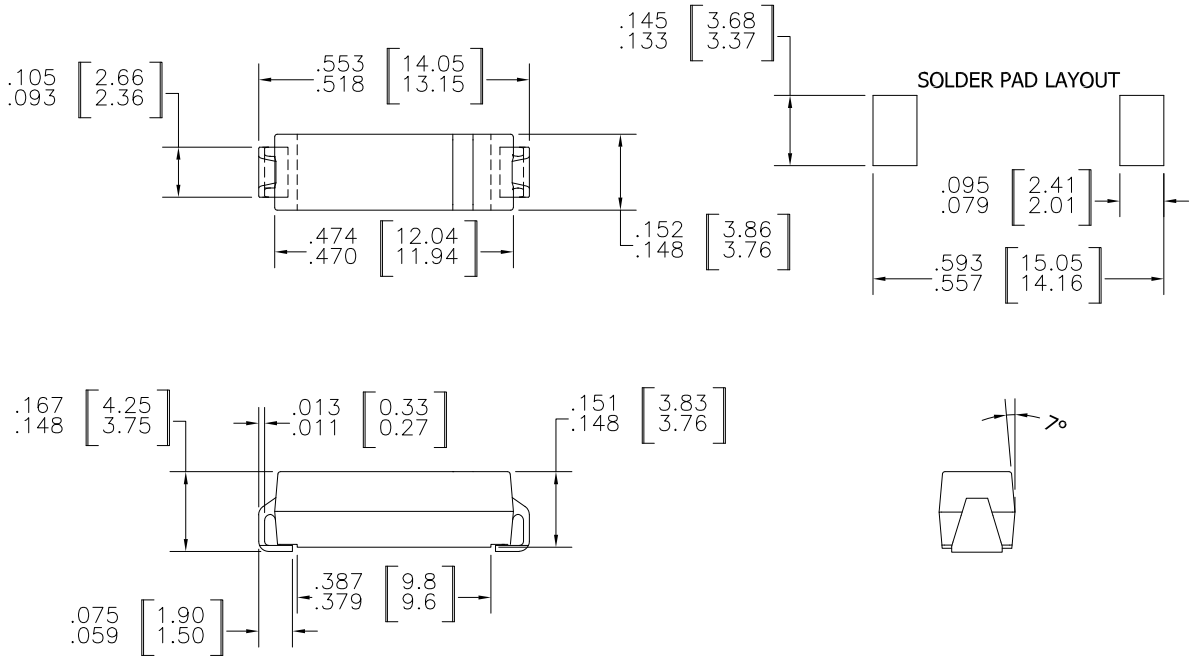
[1]25°C ambient temperature unless stated otherwise.

[2]Check Specification Definitions for conditions details.

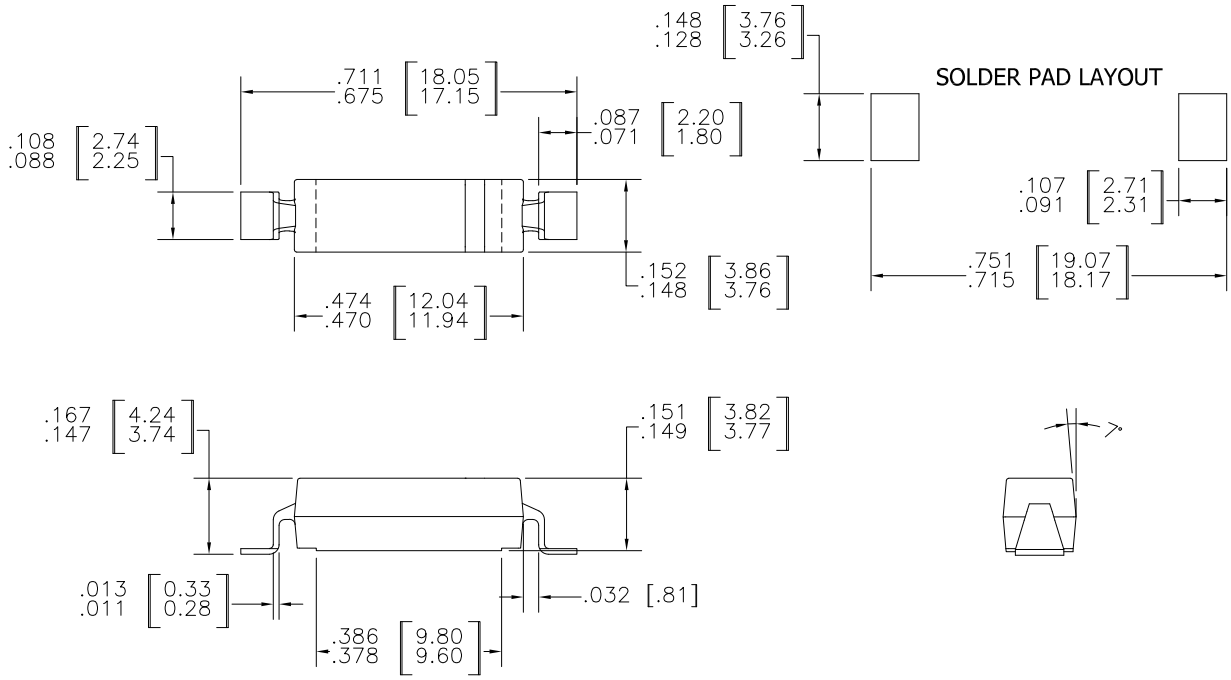
## Drawings

Dimensions in inches [mm], tolerances ±0.020 except as noted

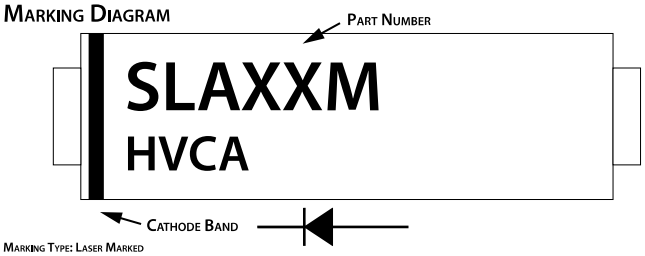
### Figure 1 – J Lead Subseries




### Figure 2 – Gullwing Subseries

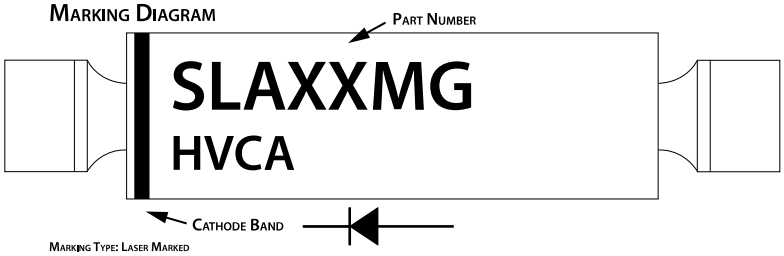


Marking Diagram




Marking Type: Laser Marked
(Markings are subject to minor changes)

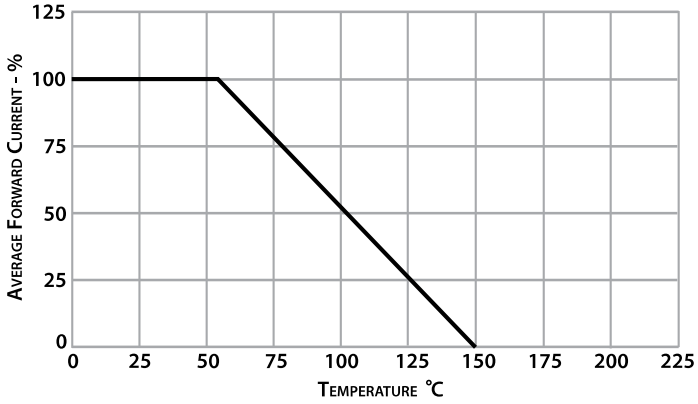
Marking Diagram




Marking Type: Laser Marked
(Markings are subject to minor changes)

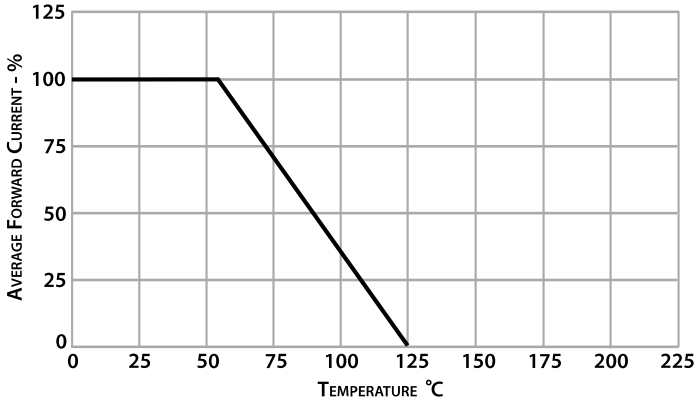
*SLA05M to SLA12M, SLA05MG to SLA12MG*

Forward Current Derating Curve




*SLA15M to SLA25M, SLA15MG to SLA25MG*

Forward Current Derating Curve




## Specification Definitions

| Specifications | | Conditions |
|---|---|---|
| $V_{RRM}$ | Maximum Repetitive Reverse Voltage | - |
| $I_{FAVM1}$ | Maximum Average Forward Current | At $T_L$ = 55°C |
| $I_{FAVM2}$ | Maximum Average Forward Current | At $T_L$ = 100°C |
| $I_{FAVM3}$ | Maximum Average Forward Current | At $T_C$ = 70°C |
| $V_F$ | Maximum Forward Voltage Drop | At $I_{FAVM1}$ |
| $I_R$ | Maximum Leakage Current | At $V_{RRM}$ |
| $I_{FSM}$ | Maximum Surge Current | At 8.3 mS, Single Half Sine |
| $C_J$ | Typical Junction Capacitance | At $V_R$ = 0VDC, f = 1MHz |
| $T_{RR}$ | Maximum Reverse Recovery Time | $I_F$ = 0.5 $I_{FAVM1}$; $I_R$ = -$I_{FAVM1}$; $I_{RR}$ = -0.25 $I_{FAVM1}$ |
| $R_{\theta JL}$ | Typical Thermal Resistance Junction to Lead | Device Mounted on 0.2” x 0.2” (5mm x 5mm) Copper Solder Pads |
| $R_{\theta JC}$ | Typical Thermal Resistance Junction to Case | Device Mounted on 0.2” x 0.2” (5mm x 5mm) Copper Solder Pads |

RoHS COMPLIANT

Note: Specifications subject to change without notice. Photo is representation only.