



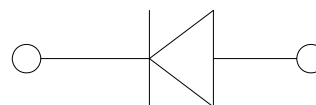
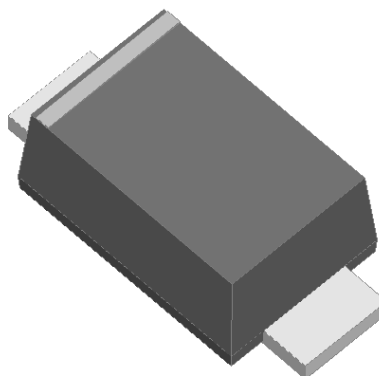
Rectifier diode
Reverse Voltage1000v
Forward current-2A

Features

Glass passivated chip
High surge current capability
Ideal for surface mounted applications
Low power loss, high efficiency
Plastic Case Material has UL Flammability

Mechanical Data

Package: SMAF
Terminals: Tin Plated leads, solderable per
Mil-STD-750 Method 2026
Polarity: As marked
Molding compound meets UL 94 V-0 flammability rating,
ROHS-compliant



Maximum Ratings (Ta=25°C Unless otherwise specified)

| Type Number | SYMBOL | S2MF | Unit |
|---|-------------|-----------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 1000 | V |
| Maximum Average Forward Rectified Current | $I_{O(AV)}$ | 2.0 | A |
| Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated | IFSM | 60.0 | A |
| Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C | | 120.0 | A |
| Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode | I^2t | 14.9 | A ² S |
| Maximum Forward Voltage at 2.0A DC | V_{FM} | 1.1 | V |
| Maximum Reverse Current TA = 25°C | IR | 5.0 | uA |
| at Rated DC Blocking Voltage TA = 125°C | | 100.0 | |
| Typical Thermal Resistance Between junction and | R_{QJa} | 65.0 | °C/W |
| Operating Junction Temperature Range | T_J | —55to+150 | °C |
| Storage Temperature Range | T_{STG} | —55to+150 | °C |



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

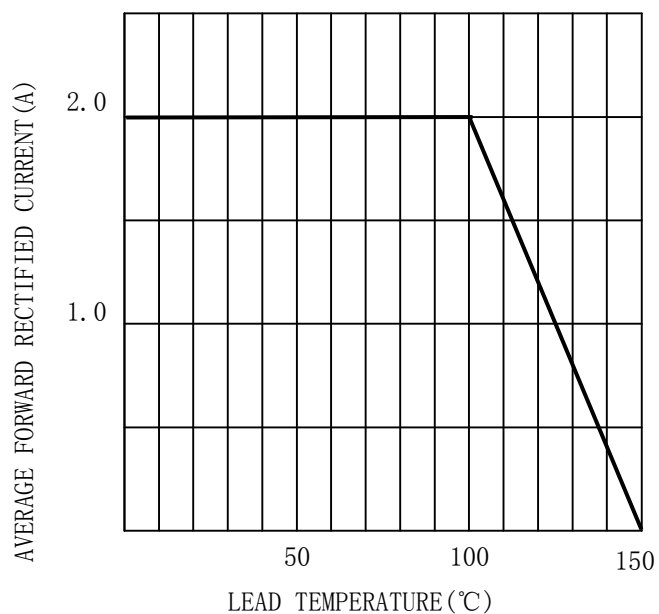


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

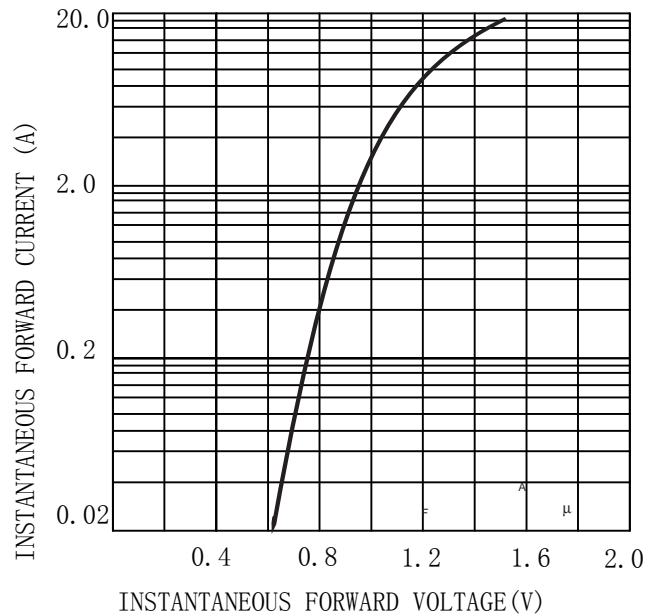


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

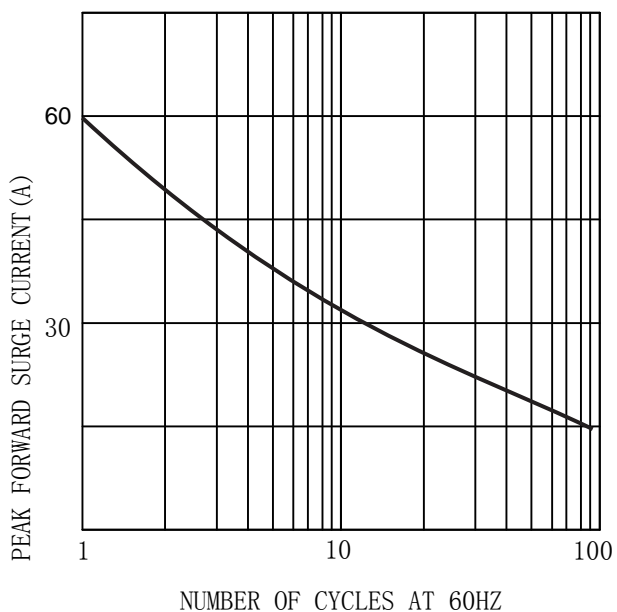
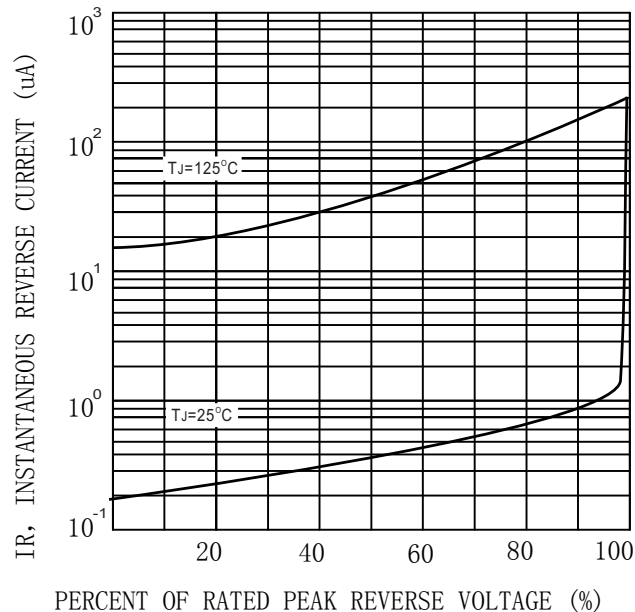
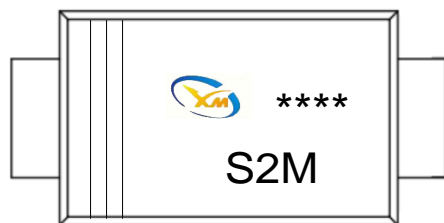



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

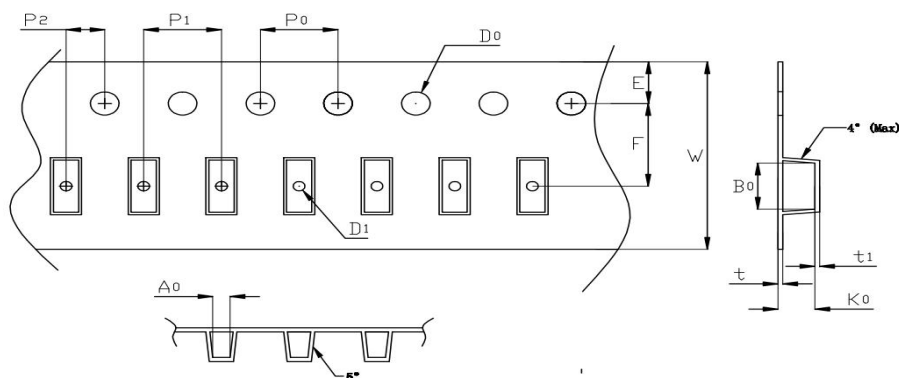
**** = Date Code Marking

S2M = Marking Code

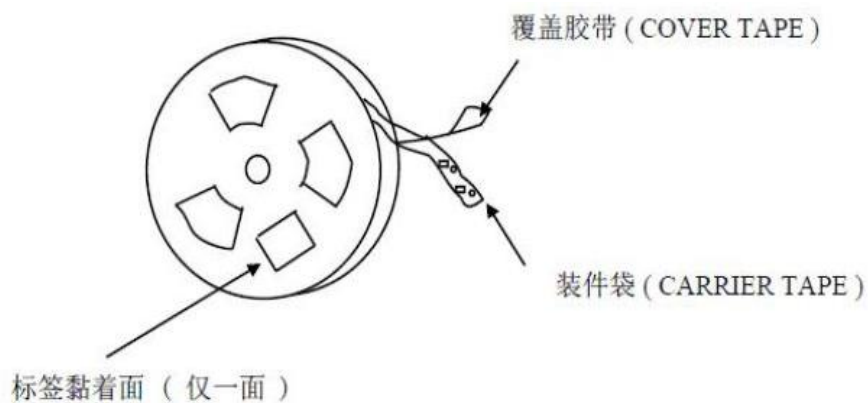
Print according to customer request

PACKING REQUIRMENTS

• Carrier tape packing



| Specificati ons | Carrier tape type | Ao | Bo | Ko | Po | W | t | Explain |
|--------------------|----------------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|---------|
| SMAF | Anti-static | 2.83 ± 0.10 | 4.9 ± 0.10 | 1.45 ± 0.05 | 4.00 ± 0.10 | 12.0 ± 0.10 | 0.23 ± 0.05 | |

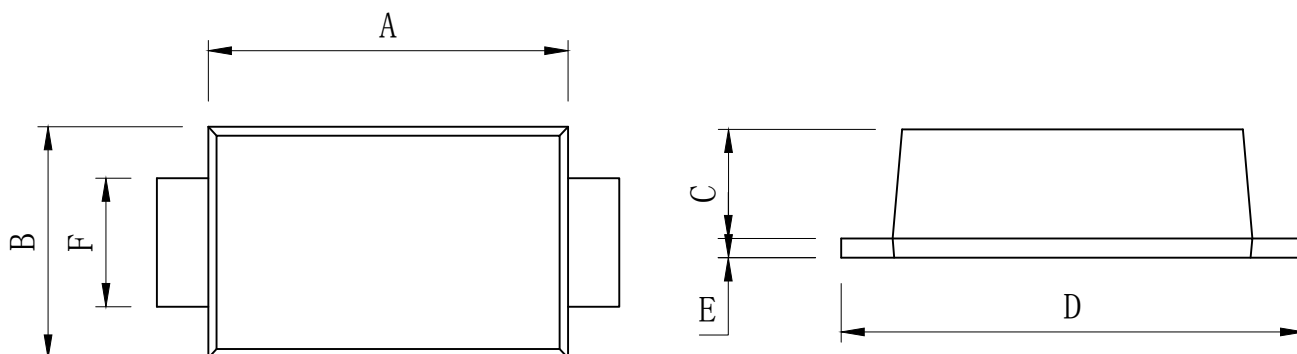


| DEVICE TYPE | Tape width | 13"Reel | | | 7"Reel | | |
|----------------|---------------|--------------------|-----------------|--------------------|--------------------|-----------------|--------------------|
| | | Q'TY/REEL (pcs) | BOX/CAR TOON | Q'TY/REEL (pcs) | Q'TY/REEL (pcs) | BOX/CAR TOON | Q'TY/REEL (pcs) |
| SMAF | 12mm | 10000 | 20 | 200000 | 3000 | 64 | 192000 |



Outline Dimensions

SMAF



| SMAF | | | | |
|------|---------|------|-----|-----|
| DIM | INC HES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | 0.13 | 0.15 | 3.2 | 3.8 |
| B | 0.09 | 0.11 | 2.3 | 2.7 |
| C | 0.03 | 0.05 | 0.8 | 1.2 |
| D | 0.16 | 0.20 | 4 | 5 |
| E | / | 0.01 | / | 0.3 |
| F | 0.04 | 0.08 | 1 | 2 |



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