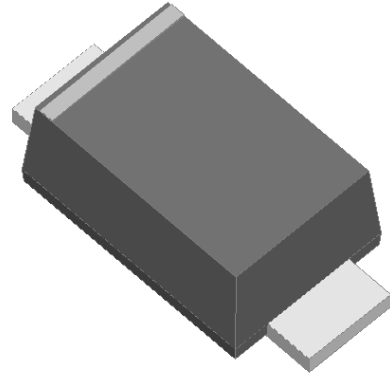




Schottky Diodes
Reverse Voltage-40to200v
Forward current-2A

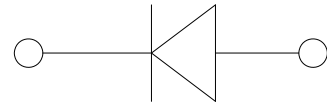
Features

- Schottky chip
- Ideal for surface mounted applications
- Low forward voltage drop, Low power loss, high efficiency
- Plastic Case Material has UL Flammability



Mechanical Data

- Package: SOD123FL
- 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 | K24 | K26 | K28 | K210 | K215 | K220 | Umit |
|---|-------------|-----------|------|------|------|------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 40 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | V_{RMS} | 28 | 42 | 56 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current at TL = 100°C | $I_{O(AV)}$ | 2.0 | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated | IFSM | 40.0 | | | | | | A |
| Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C | | 80.0 | | | | | | A |
| Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode | I^2t | 6.6 | | | | | | A ² S |
| Maximum Forward Voltage at 2.0A DC | V_{FM} | 0.55 | 0.75 | 0.85 | | 0.92 | | V |
| Maximum Reverse Current TA = 25°C | IR | 0.1 | | 0.05 | | | | mA |
| at Rated DC Blocking Voltage TA = 100°C | | 10 | | 5 | | | | mA |
| Typical Thermal Resistance | R_{QJA} | 75.0 | | | | | | °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

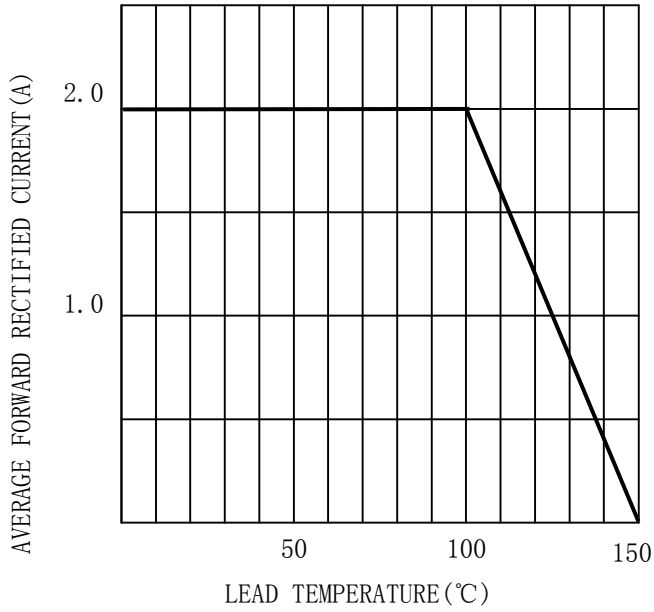


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

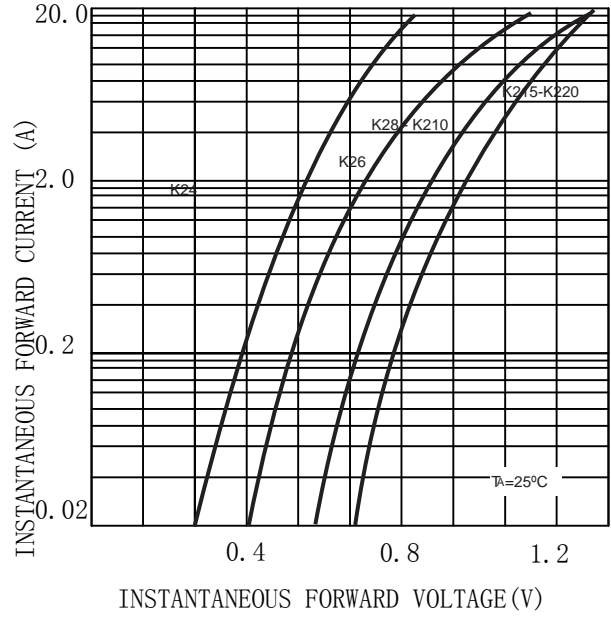


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

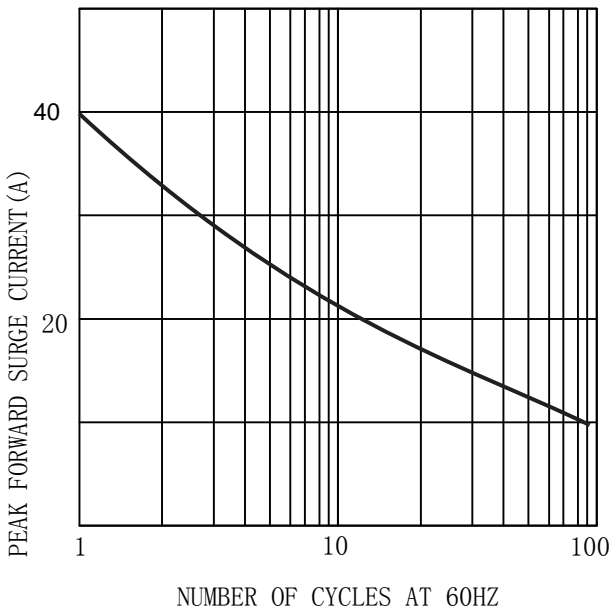
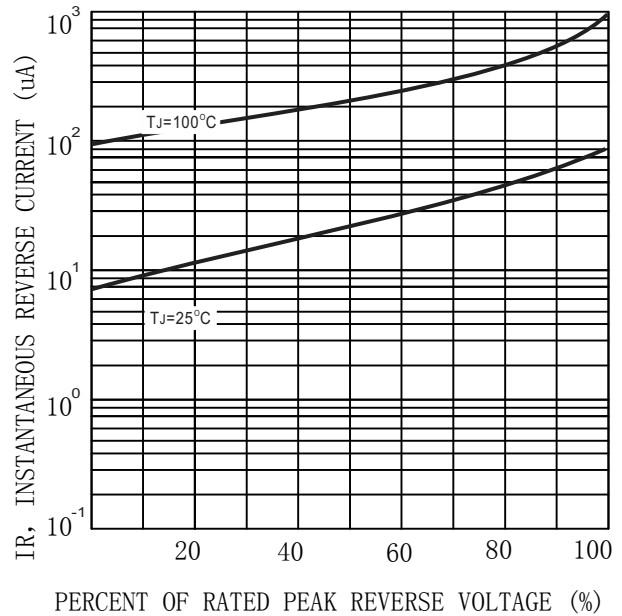
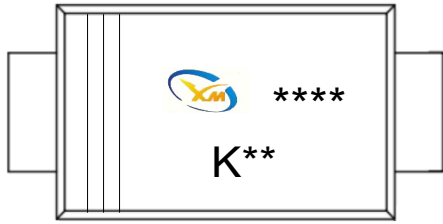



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

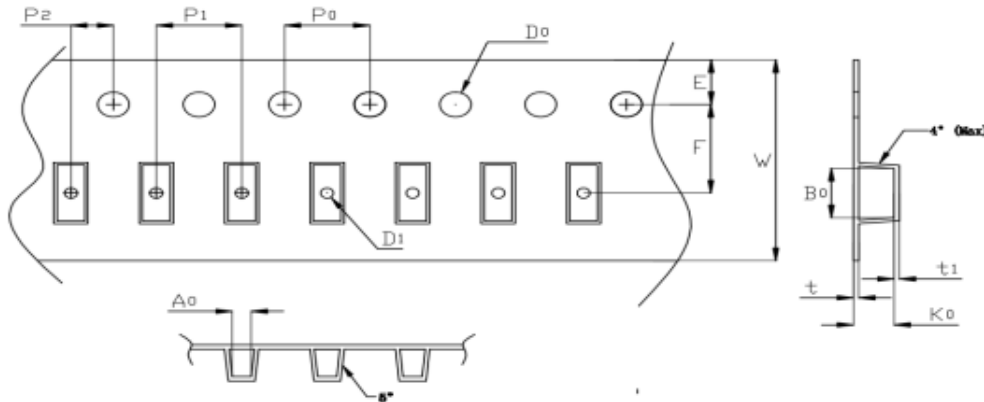
**** = Date Code Marking

K** = Marking Code

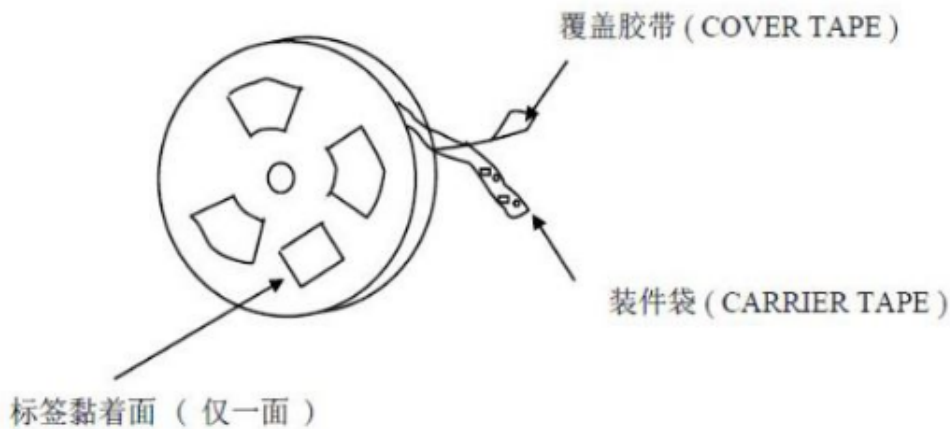
Print according to customer request

PACKING REQUIRMENTS

- Carrier tape packing



| Specifications | Carrier tape type | Ao | Bo | Ko | Po | W | t | Explain |
|----------------|-------------------|-----------|-----------|-----------|-----------|----------|-----------|---------|
| SOD-123FL | Anti-static | 1.95±0.10 | 3.95±0.10 | 1.35±0.10 | 4.00±0.10 | 8.0±0.10 | 0.23±0.05 | |

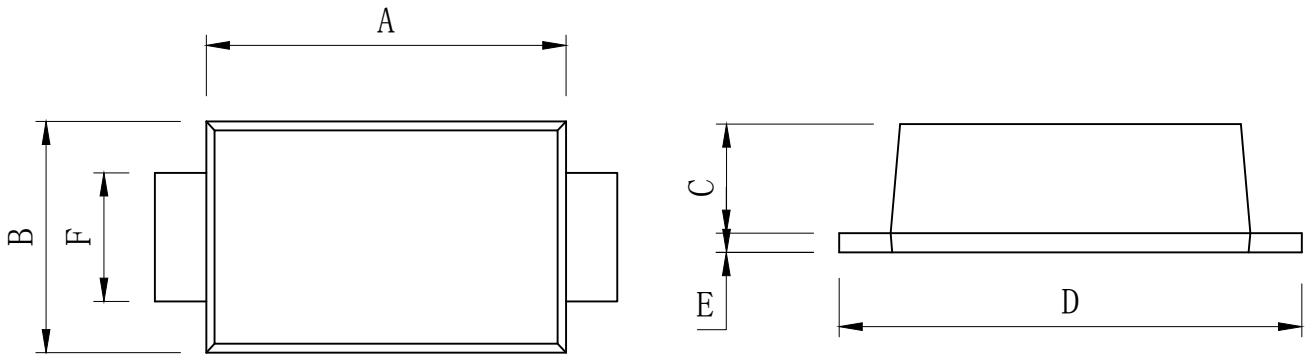


| DEVICE TYPE | Tape width | 7" Reel | | |
|-------------|------------|-----------------|--------------|-----------------|
| | | Q'TY/REEL (pcs) | BOX/CAR TOON | Q'TY/REEL (pcs) |
| SOD-123FL | 8mm | 3000 | 80 | 240000 |



Outline Dimensions

SOD123FL



| SOD123FL | | | | |
|----------|---------|------|-----|-----|
| DIM | INC HES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | 0.10 | 0.12 | 2.5 | 3 |
| B | 0.06 | 0.08 | 1.5 | 2 |
| C | 0.03 | 0.06 | 0.7 | 1.5 |
| D | 0.12 | 0.16 | 3 | 4 |
| E | / | 0.01 | / | 0.3 |
| F | 0.02 | 0.06 | 0.5 | 1.5 |



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