

Schottky Barrier Diode

■ Applications

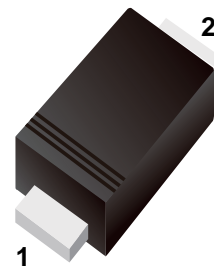
General rectification

■ Features

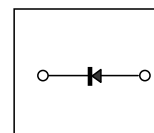
- 1) Small power mold type. (PMDU)
- 2) Low I_R .
- 3) High reliability.

■ Construction

Silicon epitaxial planar


■ Simplified outline(SOD-123FL)
■ Marking

| | |
|---------|----|
| Marking | 76 |
|---------|----|

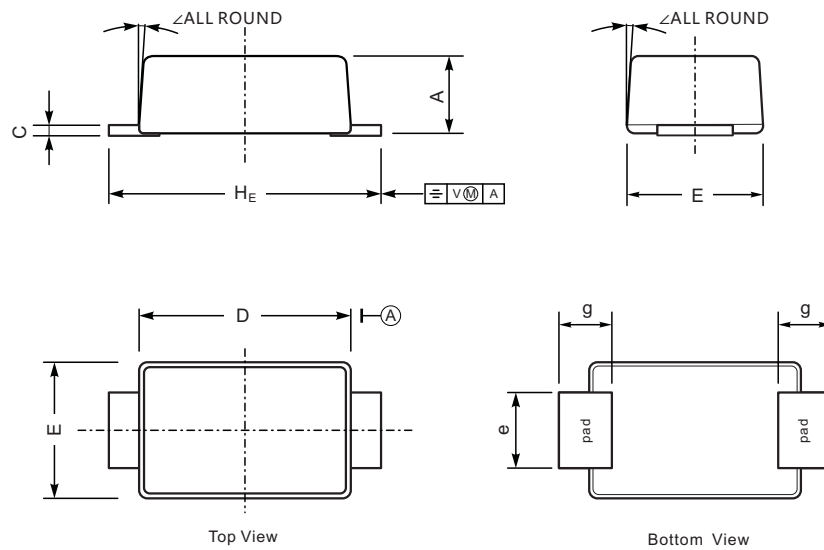
■ Structure

■ Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|--|-----------|-------------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 60 | V |
| Reverse voltage (DC) | V_R | 60 | V |
| Average rectified forward current | I_o | 1 | A |
| Forward current surge peak (60Hz · 1cyc) | I_{FSM} | 30 | A |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -40 to +150 | °C |

(*1) Mounted on epoxy board. 180°Half sine wave

■ Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------------|--------|------|------|------|---------|-------------------|
| Forward voltage | V_F | - | 0.49 | 0.55 | V | $I_F=1.0A$ |
| Reverse current | I_R | - | 7.0 | 50 | μA | $V_R=60V$ |
| Capacitance terminals | C_t | - | 40 | - | pF | $V_R=10V, f=1MHz$ |

■ SOD-123FL


| UNIT | | A | C | D | E | e | g | H _E | ∠ |
|------|-----|-----|------|-----|-----|-----|-----|----------------|----|
| mm | max | 1.1 | 0.20 | 2.9 | 1.9 | 1.1 | 0.9 | 3.8 | 7° |
| | min | 0.9 | 0.12 | 2.6 | 1.7 | 0.8 | 0.7 | 3.5 | |
| mil | max | 43 | 7.9 | 114 | 75 | 43 | 35 | 150 | |
| | min | 35 | 4.7 | 102 | 67 | 31 | 28 | 138 | |