

Features

- Low reverse current and low forward voltage
- High reliability
- Small surface mounting type



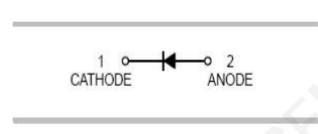
Typical Applications

- For general purpose applications

Mechanical Data

- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208

SOD-323



Maximum Ratings (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | PMEG4010CEJ,115-JSM | Units |
|---|-------------|---------------------|-------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 40 | V |
| RMS Reverse Voltage | V_{RMS} | 28 | V |
| Maximum Average Forward Output Current | $I_{F(AV)}$ | 1 | A |
| Peak Forward Surge Current, 8.3ms Single Half-sine-wave | I_{FSM} | 10 | A |

Thermal Characteristics

| Parameter | Symbol | PMEG4010CEJ,15-JSM | Units |
|--------------------------------------|-------------------|--------------------|-------|
| Power Dissipation | P_D | 250 | mW |
| Typical Thermal Resistance per leg | $R_{\theta JA}^*$ | 400 | °C /W |
| Operating Junction Temperature Range | T_J | 125 | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | °C |

* Part mounted on FR-4 board with recommended pad layout

Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min. | Typ. | Max. | Units |
|-------------------------------|------------|--------------------------------|------|------|------|-------|
| Forward Voltage | V_F^* | $I_F=1\text{A}$ | | | 0.60 | V |
| | | $I_F=3\text{A}$ | - | - | 0.90 | |
| Maximum Peak Reverse Current | I_R^{**} | $V_R=40\text{V}$ | - | - | 1 | mA |
| Capacitance Between Terminals | C_T | $V_R=4\text{V}, f=1\text{MHz}$ | - | 39 | 120 | pF |

*Pulse width $\leq 380\text{ }\mu\text{s}$, Duty cycle $< 2\%$ *

**pulse test, $t_p \leq 5\text{ms}$

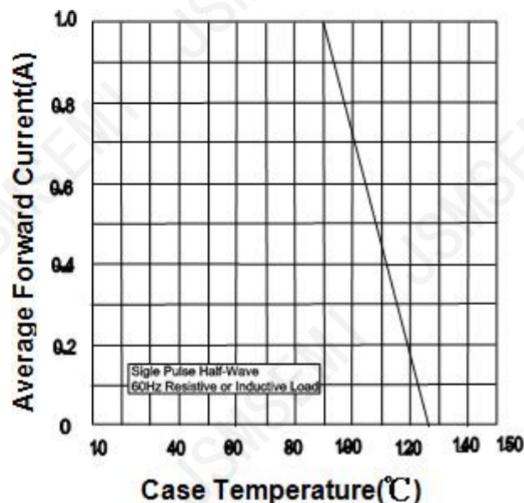
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)


Fig.1 Forward Current Derating Curve

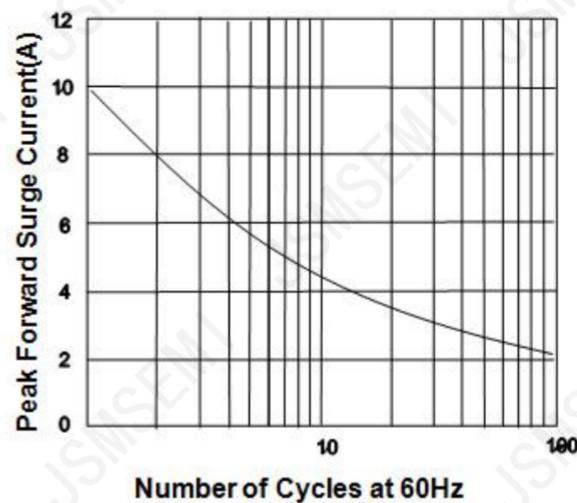


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

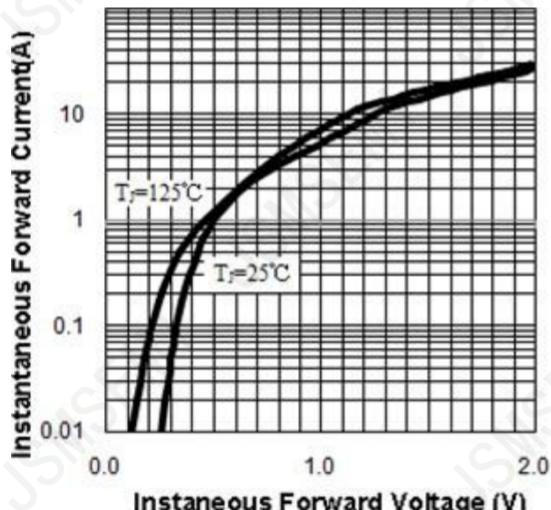


Fig.3 Typical Instantaneous Forward Characteristics

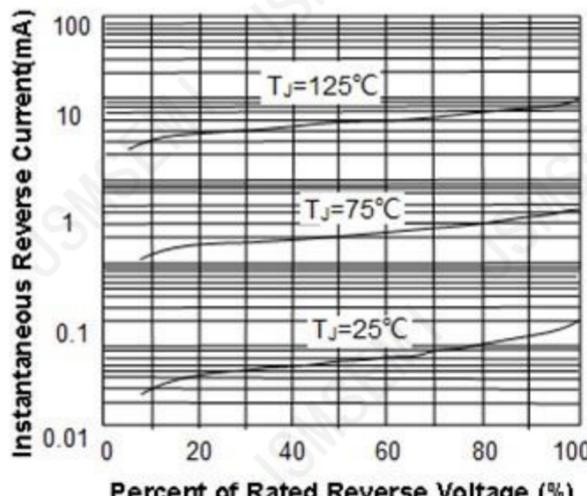
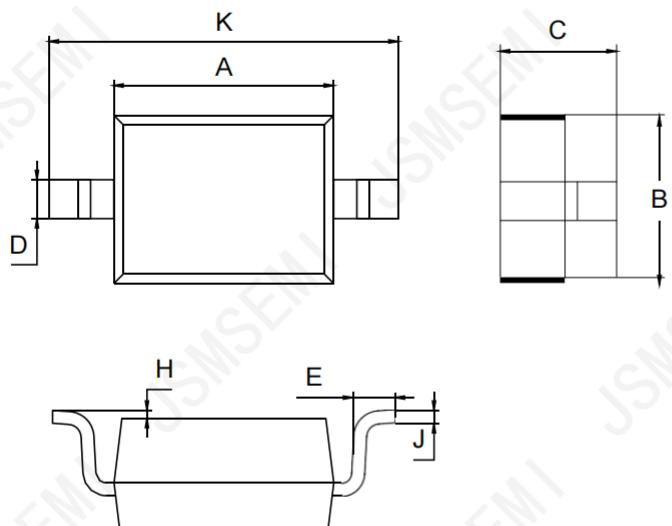


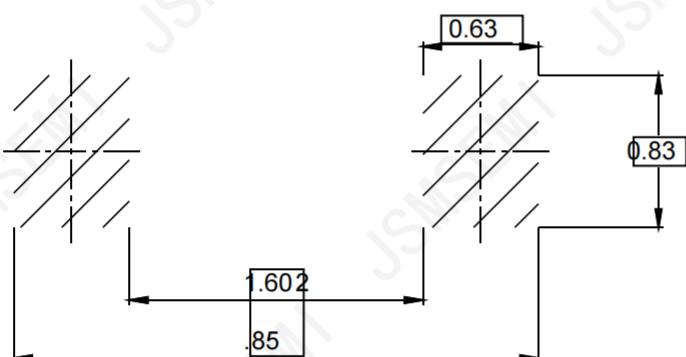
Fig.4 Typical Reverse Characteristics

Package Outline Dimensions (unit: mm)

SOD-323



| SOD-323 | | |
|---------|------|------|
| Dim | Min | Max |
| A | 1.60 | 1.80 |
| B | 1.20 | 1.40 |
| C | 0.80 | 0.90 |
| D | 0.25 | 0.35 |
| E | 0.22 | 0.42 |
| H | 0.02 | 0.10 |
| J | 0.05 | 0.15 |
| K | 2.55 | 2.75 |

Mounting Pad Layout (unit: mm)


Revision History

| Rev. | Change | Date |
|------|-----------------|-----------|
| V1.0 | Initial version | 6/27/2021 |
| | | |

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