

MPH80E

Silicon Epitaxial Planar Switching Diode

Features

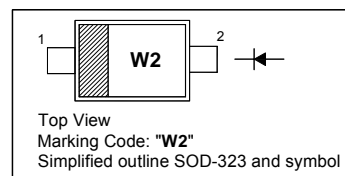
- High-speed
- High reliability

Applications

- Ultra high speed switching

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



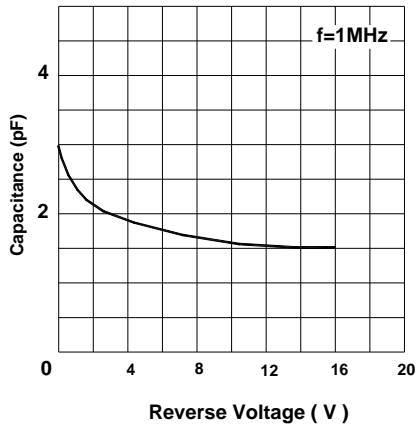
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|-----------------------------------|-------------|---------------|------------------|
| Peak Reverse Voltage | V_{RM} | 80 | V |
| Reverse Voltage | V_R | 80 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 100 | mA |
| Peak Forward Current | I_{FM} | 300 | mA |
| Surge Current (1 μs) | I_{surge} | 4 | A |
| Power Dissipation | P_{tot} | 200 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

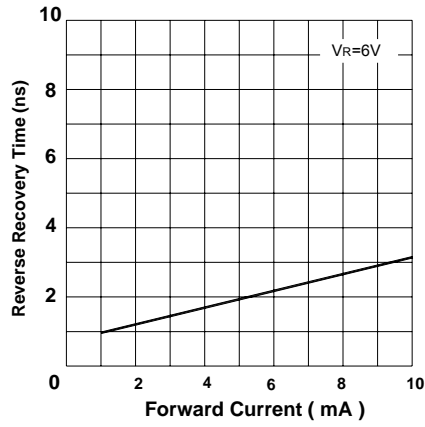
Characteristics at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Max. | Unit |
|--|----------|------|---------------|
| Forward Voltage at $I_F = 100\text{ mA}$ | V_F | 1.2 | V |
| Reverse Current at $V_R = 70\text{ V}$ | I_R | 0.1 | μA |
| Diode Capacitance at $V_R = 6\text{ V}$, $f = 1\text{ MHz}$ | C_d | 3.5 | pF |
| Reverse Recovery Time at $I_F = 5\text{ mA}$, $V_R = 6\text{ V}$ | t_{rr} | 4 | ns |

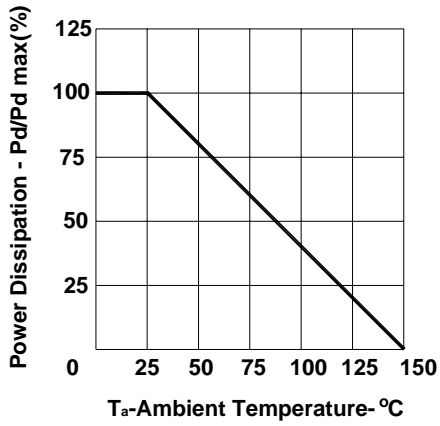
Capacitance



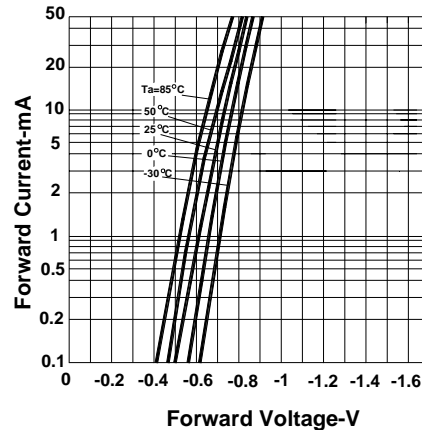
Reverse Recovery Time



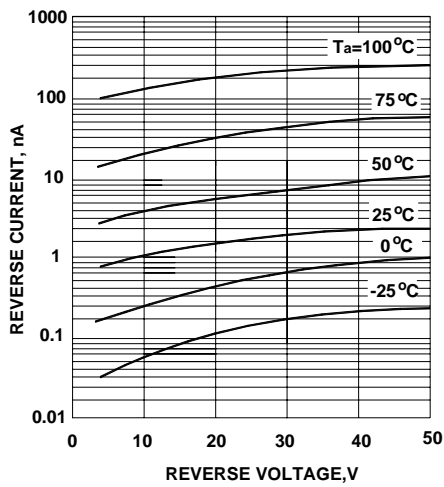
Power Attenuation Curve



Forward Characteristics



REVERSE CHARACTERISTICS

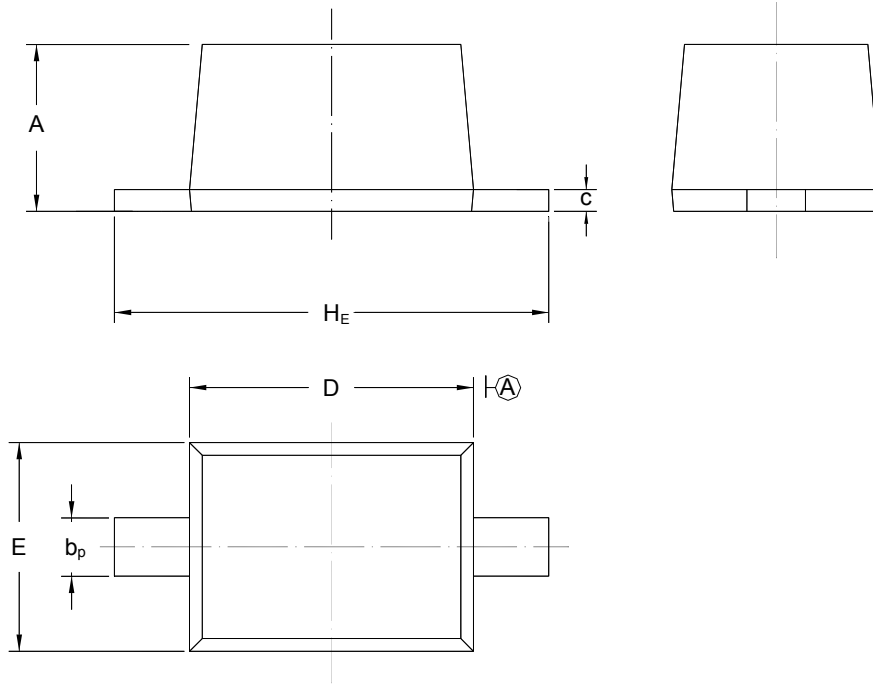


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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



| UNIT | A | b _p | C | D | E | H _E |
|------|--------------|----------------|--------------|--------------|--------------|----------------|
| mm | 1.10 0.80 | 0.40 0.25 | 0.15 0.10 | 1.80 1.60 | 1.35 1.15 | 2.80 2.30 |