## Features

- Average Rectified Output Current:$I_O$=400mA
- Power Dissipation of 200mW




SOD-323



## Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|---|---|---|---|
| PMEG4005CEAX | SOD-323 | B4 | 3000 |

## Maximum Ratings (Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage | $V_{RRM}$ | 40 | V |
| Reverse Voltage | $V_R$ | 40 | V |
| Average Forward Rectified Current | $I_{F(AV)}$ | 400 | mA |
| Non-Repetitive Peak Forward Surge Current at t = 1 s | $I_{FSM}$ | 2 | A |
| Power Dissipation | $P_{tot}$ | 200 | mW |
| Operating and Storage Temperature Range | $T_j$, $T_{stg}$ | - 65 to + 125 | °C |

## Electrical Characteristics (Ta=25°C unless otherwise specified)

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 40 | -<br>-<br>- | -<br>-<br>- | V |
| Reverse Leakage Current<br>at $V_R$<br>at $V_R$ = 20 V<br>at $V_R$ = 10 V | $I_R$ | -<br>-<br>- | -<br>-<br>- | 5<br>5<br>5 | μA |
| Forward Voltage<br>at $I_F$ = 20 mA<br>at $I_F$ = 200 mA | $V_F$ | -<br>- | -<br>- | 0.37<br>0.6 | V |
| Total Capacitance<br>at $V_R$ = 0 V, f = 1 MHz | $C_T$ | - | 50 | - | pF |
| Reverse Recovery Time<br>at $I_F$ = $I_R$ = 200 mA, $I_{rr}$ = 0.1 $I_R$, $R_L$ = 100 Ω | $t_{rr}$ | - | 10 | - | ns |

## Typical Characteristics

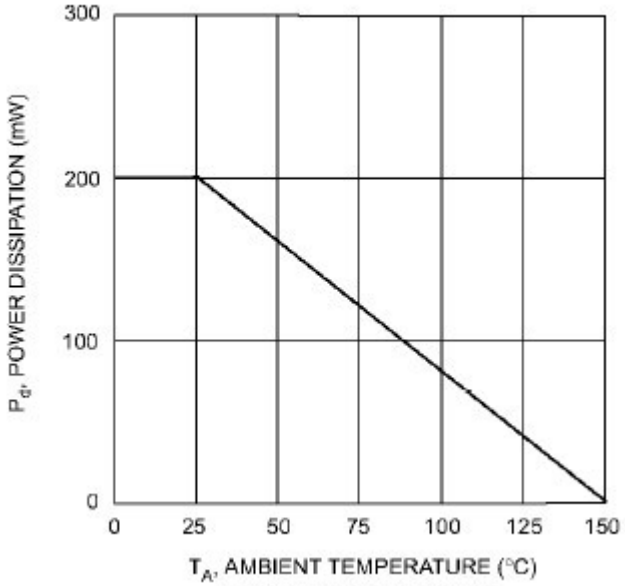



Fig. 1 Power Derating Curve

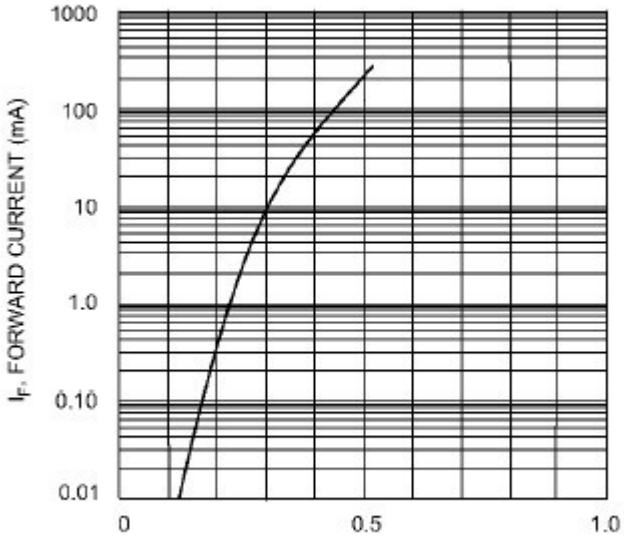



Fig. 2 Typical Forward Characteristics

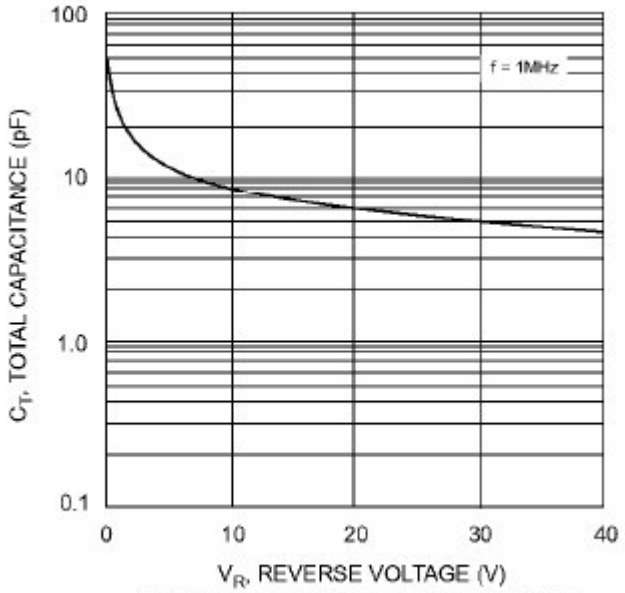
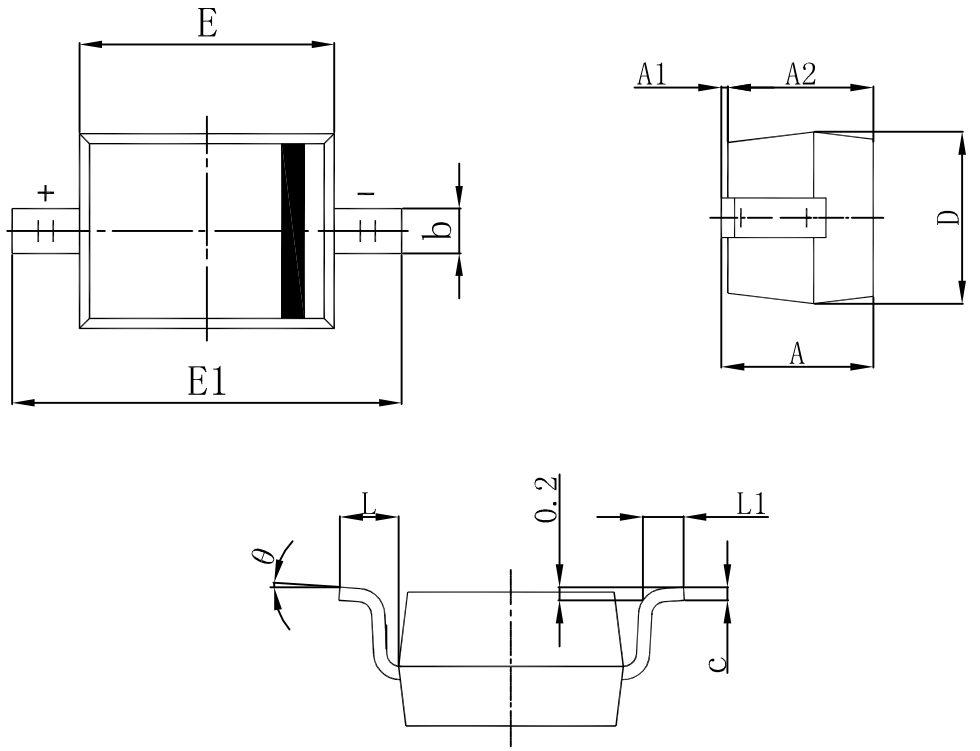



Fig. 3 Total Capacitance vs Reverse Voltage

## Package Outline Dimensions

SOD-323




| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | | 1.100 | | 0.043 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.800 | 1.000 | 0.031 | 0.039 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.200 | 1.400 | 0.047 | 0.055 |
| E | 1.600 | 1.800 | 0.063 | 0.071 |
| E1 | 2.500 | 2.750 | 0.098 | 0.108 |
| L | 0.475 REF | | 0.019 REF | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| θ | 0° | 8° | 0° | 8° |

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## HXY MOSFET:

PESDNC2XD5VBL AZ4836-01L ESD5L5.0C-HXY PESDLC2FD3V3BH TPSMB100CA-VR TPSMB28A-VR
HESDSLC3V3D3B HLY323BC1524L HSD15C.TCT HSEN2411D3 HESD36VD3B ESD5LM5.0C-HXY
HRCLAMP3371ZCTFT HSTS521050B331 PJSD24CW_R1 HSG3D15B3.3MA PESDSC2FD5VU
HCEZ36V,L3F HPTVSUC3D5VB 60N06 AZ4007-01H BV05C-H PESDNC2XD5VBF AQ15C-01FTG
HSEN3611D3 LM393DR-HXY HACPDQC5V0-HF HAZ4007-01H RLSD32A121V PJEC5V0M1FN2