# NSR0240V2T1G
## SCHOTTKY BARRIER DIODE

### Features
- Peak Forward Current: $I_{FM}$= 350mA
- Power Dissipation of 150mW




SOD-523



### Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|---|---|---|---|
| NSR0240V2T1G | SOD-523 | S4 | 3000 |

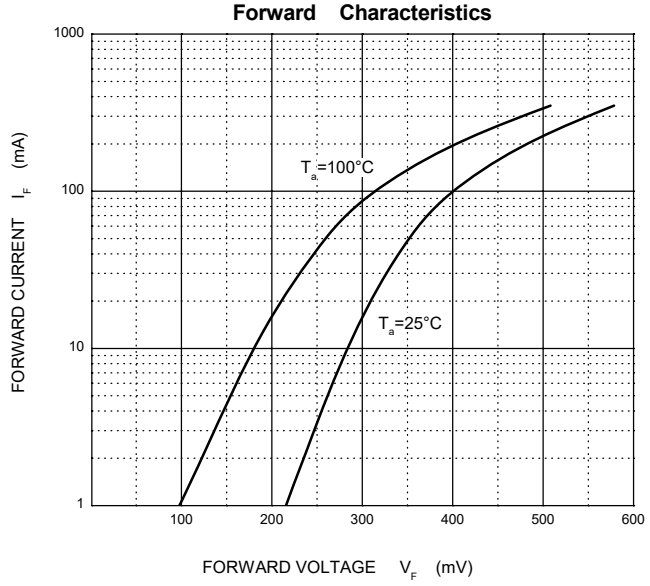
### Maximum Ratings (Ta=25°C unless otherwise noted)

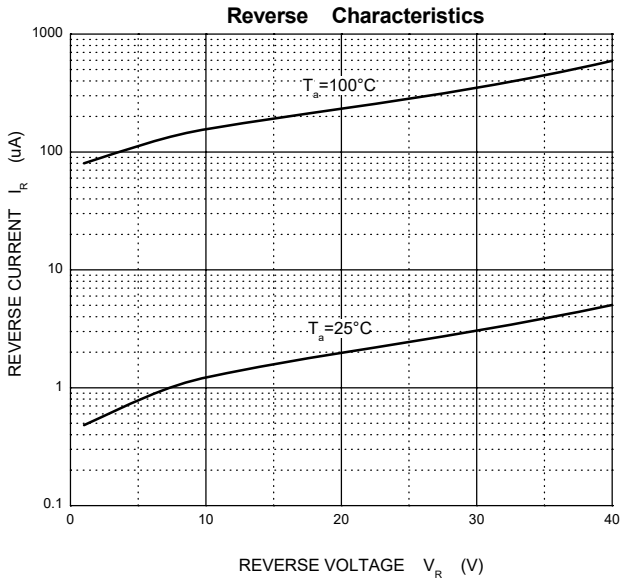
| Symbol | Parameter | Value | Unit |
|---|---|---|---|
| $V_{RRM}$ | Peak Repetitive Reverse Voltage | 40 | V |
| $V_{RWM}$ | Working Peak Reverse Voltage | | |
| $V_R$ | DC Blocking Voltage | | |
| $V_{R(RMS)}$ | RMS Reverse Voltage | 28 | V |
| $I_{FM}$ | Forward Continuous Current | 350 | mA |
| $I_{FSM}$ | Non-Repetitive Peak Forward Surge Current@t=8.3ms | 2 | A |
| $P_D$ | Power Dissipation | 150 | mW |
| $R_{\Theta JA}$ | Thermal Resistance From Junction To Ambient | 667 | °C/W |
| $T_j$ | Junction Temperature | 125 | °C |
| $T_{stg}$ | Storage Temperature | -55~+150 | °C |

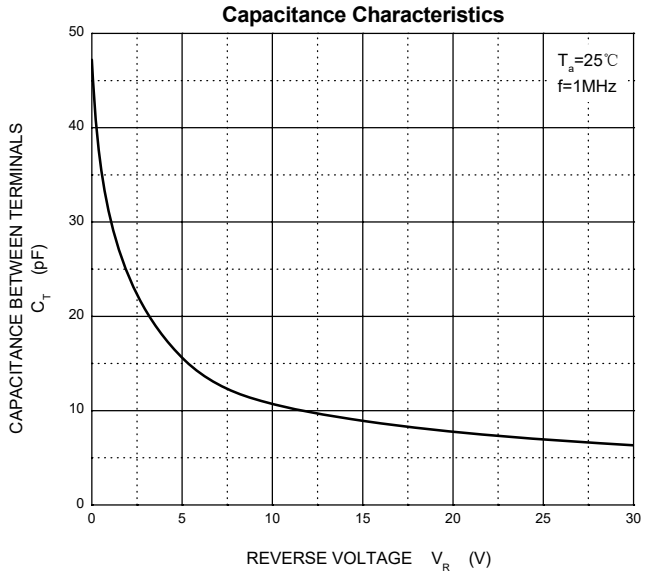
### Electrical Characteristics (Ta=25°C unless otherwise specified)

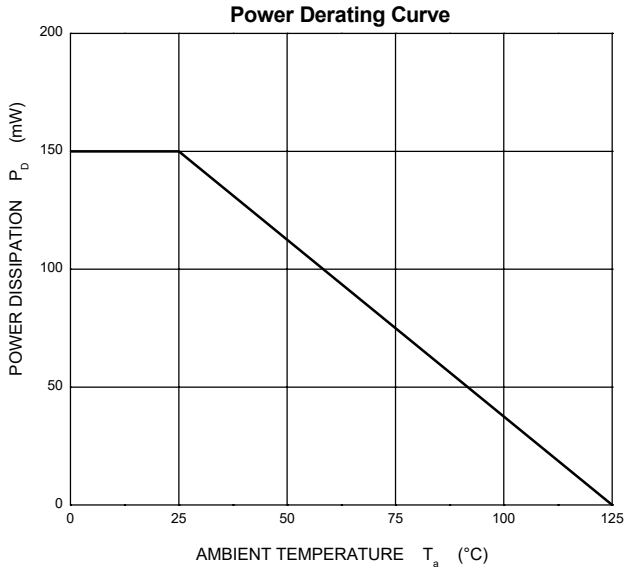
| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse voltage | $V_{(BR)}$ | $I_R$=100μA | 40 | | | V |
| Reverse current | $I_R$ | $V_R$=30V | | | 5 | μA |
| | | $V_R$=20V | | | 2 | |
| | | $V_R$=10V | | | 1 | |
| Forward voltage | $V_F$ | $I_F$=1mA | | 0.27 | | V |
| | | $I_F$=5mA | | 0.32 | | |
| | | $I_F$=20mA | | | 0.37 | |
| | | $I_F$=200mA | | | 0.6 | |
| Total capacitance | $C_{tot}$ | $V_R$=0V,f=1MHz | | 50 | | pF |
| Reverse recovery time | $t_{rr}$ | $I_F$= $I_R$=200mA, $I_{rr}$=0.1×$I_R$, $R_L$=100Ω | | 10 | | ns |

## Typical Characteristics

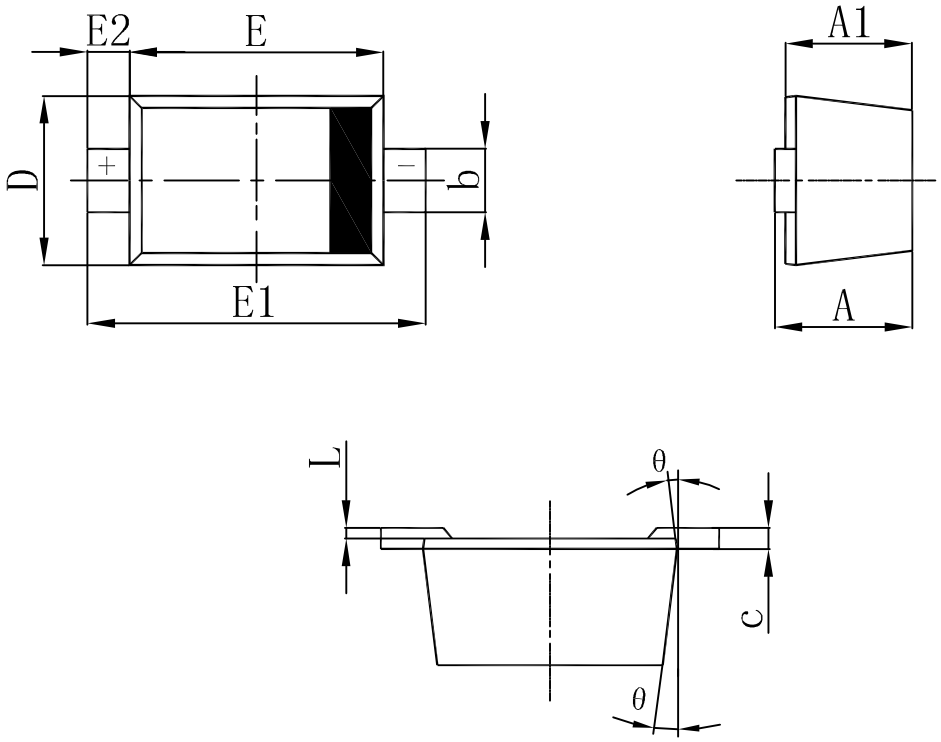


## SOD-523 Package Outline Dimensions




| Symbol | imensions In Millimeters | | imensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.510 | 0.770 | 0.020 | 0.031 |
| A1 | 0.500 | 0.700 | 0.020 | 0.028 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 0.750 | 0.850 | 0.030 | 0.033 |
| E | 1.100 | 1.300 | 0.043 | 0.051 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E2 | 0.200 REF | | 0.008 REF | |
| L | 0.010 | 0.070 | 0.001 | 0.003 |
| θ | 7° REF | | 7° REF | |

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## HXY MOSFET:

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