

# SOD323 SCHOTTKY BARRIER DIODES

**ZMS2800**  
**ZMS2811**  
**ZMS5800**

**ISSUE 1 – NOVEMBER 1998** ⚙

## FEATURES

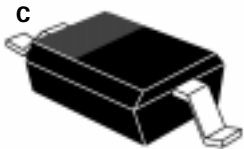
- \* Miniature Surface Mount Packages
- \* Low turn-on voltage
- \* Pico second switching speed
- \* High breakdown voltage

## APPLICATIONS

- \* Mixers
- \* Detectors
- \* Switching

## PARTMARK

ZMS2800 - BA  
ZMS2811 - BC  
ZMS5800 - BB



**SOD323**

## ABSOLUTE MAXIMUM RATINGS.

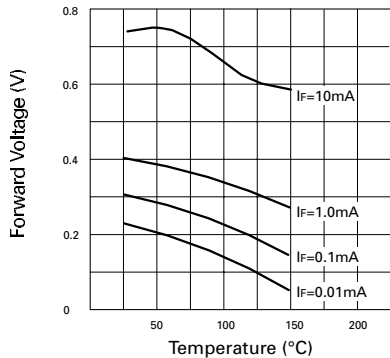
| PARAMETER                                    | SYMBOL         | VALUE       | UNIT        |
|----------------------------------------------|----------------|-------------|-------------|
| Forward Current (1μs pulse)                  | $I_F$          | 1           | A           |
| Power Dissipation at $T_{amb} = 25^{\circ}C$ | $P_{tot}$      | 250         | mW          |
| Operating and Storage Temperature Range      | $T_j; T_{stg}$ | -55 to +150 | $^{\circ}C$ |

## ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ ).

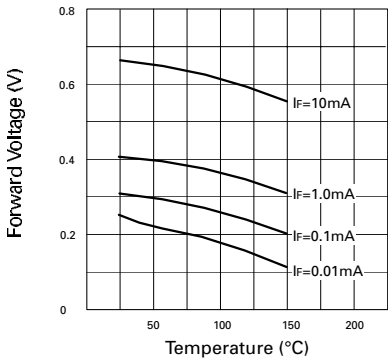
| PARAMETER                       | TYPE                          | SYMBOL   | MIN.           | TYP.       | MAX.              | UNIT           | CONDITIONS.                               |
|---------------------------------|-------------------------------|----------|----------------|------------|-------------------|----------------|-------------------------------------------|
| Breakdown Voltage               | ZMS2800<br>ZMS2811<br>ZMS5800 | $V_{BR}$ | 70<br>15<br>50 |            |                   | V<br>V<br>V    | $I_R = 10\mu A$                           |
| Reverse Leakage Current         | ZMS2800<br>ZMS2811<br>ZMS5800 | $I_R$    |                |            | 200<br>100<br>200 | nA<br>nA<br>nA | $V_R = 50V$<br>$V_R = 10V$<br>$V_R = 35V$ |
| Forward Voltage                 | ZMS2800<br>ZMS2811<br>ZMS5800 | $V_F$    |                |            | 410<br>410<br>410 | mV<br>mV<br>mV | $I_F = 1mA$                               |
| Forward Current                 | ZMS2800<br>ZMS2811<br>ZMS5800 | $I_F$    | 15<br>20<br>15 |            |                   | mA<br>mA<br>mA | $V_F = 1V$                                |
| Capacitance                     | ZC2800E<br>ZC2811E<br>ZC5800E | $C_T$    |                | 1.2<br>1.0 | 2.0<br>1.2<br>2.0 | pF<br>pF<br>pF | $V_R = 0V$ , $f = 1MHz$                   |
| Effective Minority Lifetime (1) | ZC2800E<br>ZC2811E<br>ZC5800E | $\tau$   |                |            | 100<br>100<br>100 | ps<br>ps<br>ps | $f = 54MHz$<br>$I_{pk} = 20mA$            |

**ZMS2800E**  
**ZMS2811E**  
**ZMS5800E**

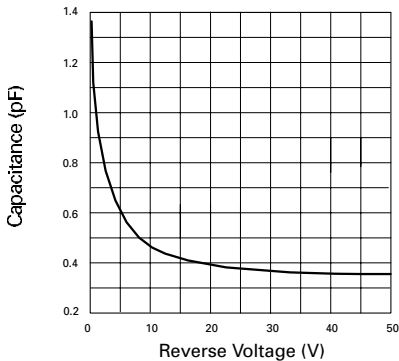
## TYPICAL CHARACTERISTICS



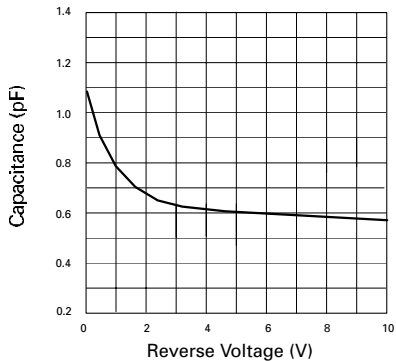
**(ZMS2800 & ZMS5800)**



**(ZMS2811)**



**(ZMS2800 & ZMS5800)**



**(ZMS2811)**

ZMS2800E  
ZMS2811E  
ZMS5800E

TYPICAL CHARACTERISTICS

