

# SOT23 SCHOTTKY BARRIER DIODES

ZC2800E  
ZC2811E  
ZC5800E

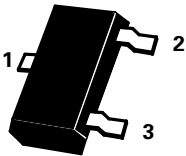
ISSUE 2 – MARCH 1995

## DIODE PIN CONNECTION



### PARTMARKING DETAIL

ZC2800E – E6  
ZC2811E – E8  
ZC5800E – E9



SOT23

## ABSOLUTE MAXIMUM RATINGS.

| PARAMETER                                           | SYMBOL        | VALUE       | UNIT               |
|-----------------------------------------------------|---------------|-------------|--------------------|
| Power Dissipation at $T_{amb} = 25^{\circ}\text{C}$ | $P_{tot}$     | 330         | mW                 |
| Operating and Storage Temperature Range             | $T_j:T_{stg}$ | -55 to +150 | $^{\circ}\text{C}$ |

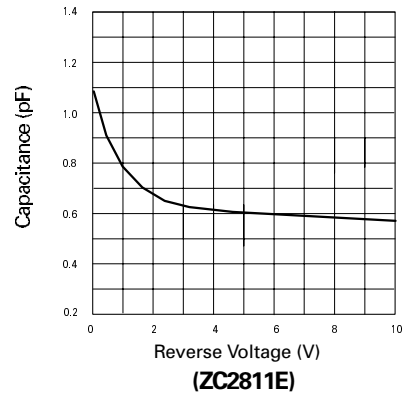
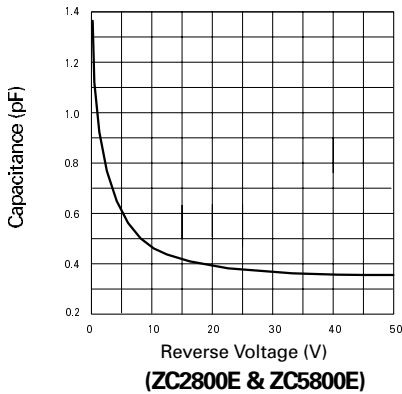
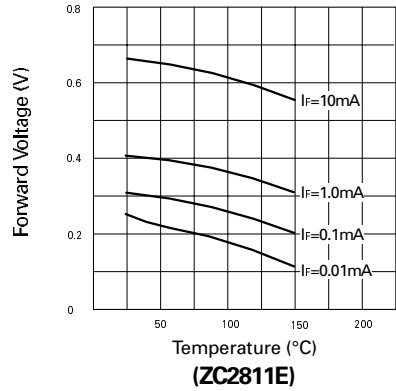
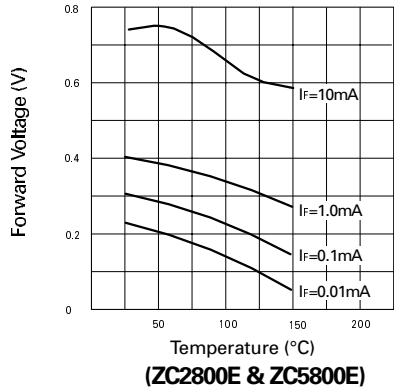
## ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}\text{C}$ ).

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

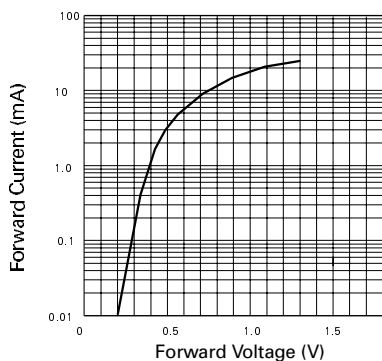
(1) Sample Test.

**ZC2800E**  
**ZC2811E**  
**ZC5800E**

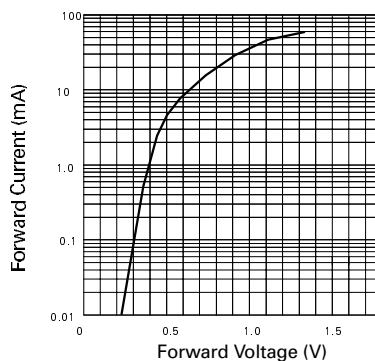
# TYPICAL CHARACTERISTICS



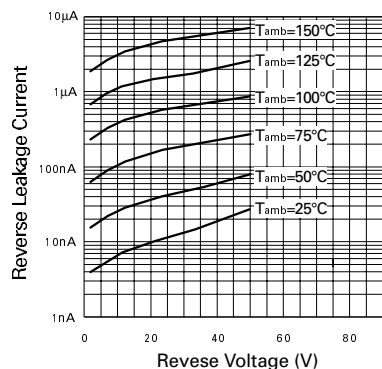
## TYPICAL CHARACTERISTICS



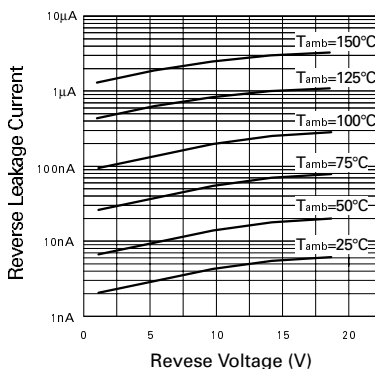
**(ZC2800E & ZC5800E)**



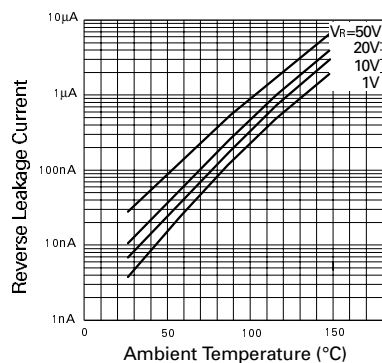
**(ZC2811E)**



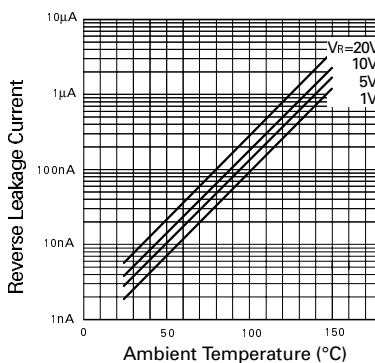
**(ZC2800E & ZC5800E)**



**(ZC2811E)**



**(ZC2800E & ZC5800E)**



**(ZC2811E)**