# Frontier Electronics Corp.

**667 E. COCHRAN STREET, SIMI VALLEY, CA 93065**
**TEL: (805) 522-9998 FAX: (805) 522-9989**
**E-mail: frontiersales@frontierusa.com**
**Web: http://www.frontierusa.com**

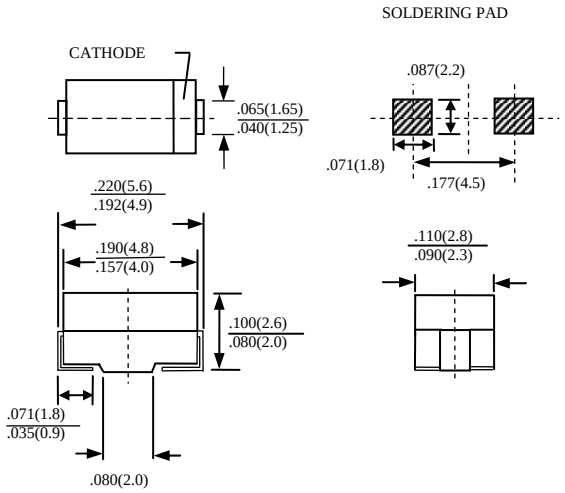

## 1WATT SURFACE MOUNT ZENER DIODE
## ZTS200-X THRU ZTS330-Z

**FEATURES**

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- LOW ZENER IMPEDANCE
- EXCELLENT CLAMPING CAPABILITY

**MECHANICAL DATA**

- CASE: MOLDED PLASTIC, DO-214AC (SMA), DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDER PLATED
- POLARITY: INDICATED BY CATHODE BAND
- WEIGHT: 0.064 GRAMS




MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO + 150°C

ELECTRICAL CHARACTERISTICS (TA=25℃UNLESS OTHERWISE NOTED) VF=1.2V MAX, IF = 200mA FOR ALL TYPES

| TYPE | ZENER BREAKDOWN VOLTAGE | | | DYNAMIC IMPEDANCES @ 25℃ $T_A$ | | MAXIMUM REVERSE CURRENT @ MEASUREMENT VOLTAGE AND 25℃TA | | MAXIMUM FORWARD VOLTAGE @25℃TA @IF=0.2A |
|---|---|---|---|---|---|---|---|---|
| | Vz @Izt | | | $Z_{ZT}$ | $I_{ZT}$ | $I_R$ | $V_R$ | $V_F$ |
| | MIN. | TYP. | MAX. | Ohms | mA | µA | V | V |
| ZTS200-X | 180 | 190 | 200 | 5000 | 0.5 | 10 | 152 | 1.2 |
| ZTS200-Y | 190 | 200 | 210 | 5000 | 0.5 | 10 | 160 | 1.2 |
| ZTS200-Z | 200 | 210 | 220 | 5000 | 0.5 | 10 | 168 | 1.2 |
| ZTS220-Y | 210 | 220 | 230 | 5000 | 0.5 | 10 | 176 | 1.2 |
| ZTS220-Z | 220 | 230 | 240 | 5000 | 0.5 | 10 | 184 | 1.2 |
| ZTS240-Y | 230 | 240 | 250 | 5000 | 0.5 | 10 | 216 | 1.2 |
| ZTS240-Z | 240 | 250 | 260 | 5000 | 0.5 | 10 | 225 | 1.2 |
| ZTS270-X | 250 | 260 | 270 | 5000 | 0.5 | 10 | 234 | 1.2 |
| ZTS270-Y | 260 | 270 | 280 | 5000 | 0.5 | 10 | 243 | 1.2 |
| ZTS270-Z | 270 | 280 | 290 | 5000 | 0.5 | 10 | 252 | 1.2 |
| ZTS300-X | 280 | 290 | 300 | 5000 | 0.5 | 10 | 261 | 1.2 |
| ZTS300-Y | 290 | 300 | 310 | 5000 | 0.5 | 10 | 270 | 1.2 |
| ZTS300-Z | 300 | 310 | 320 | 5000 | 0.5 | 10 | 279 | 1.2 |
| ZTS330-X | 310 | 320 | 330 | 5000 | 0.5 | 10 | 288 | 1.2 |
| ZTS330-Y | 320 | 330 | 340 | 5000 | 0.5 | 10 | 297 | 1.2 |
| ZTS330-Z | 330 | 340 | 350 | 5000 | 0.5 | 10 | 306 | 1.2 |

# RATING AND CHARACTERISTIC CURVES ZTS200-X THRU ZTS330-Z

FIG. 1 - MAXIMUM CONTINUOUS POWER DISSIPATION

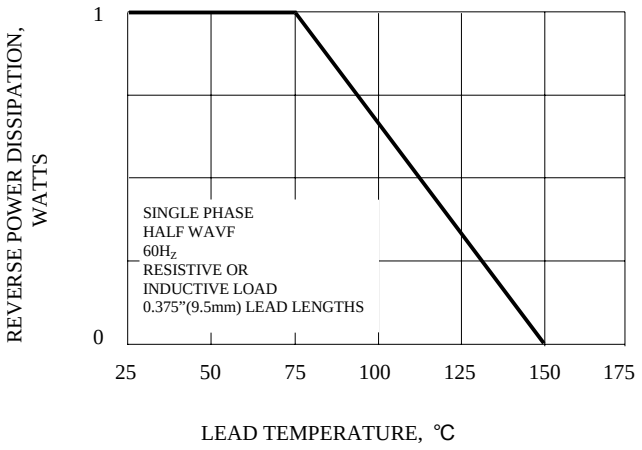



FIG. 2 - ZENER VOLTAGE VERSUS ZENER CURRENT

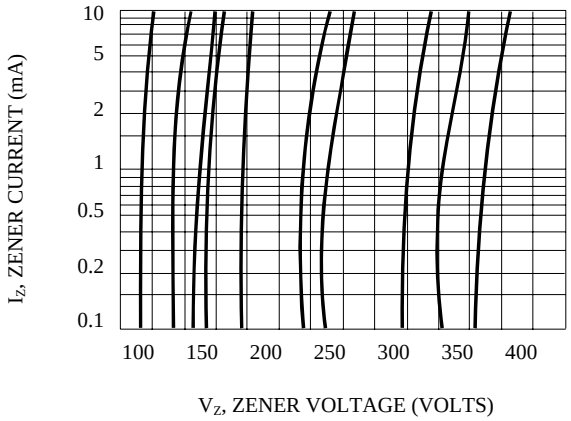



FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

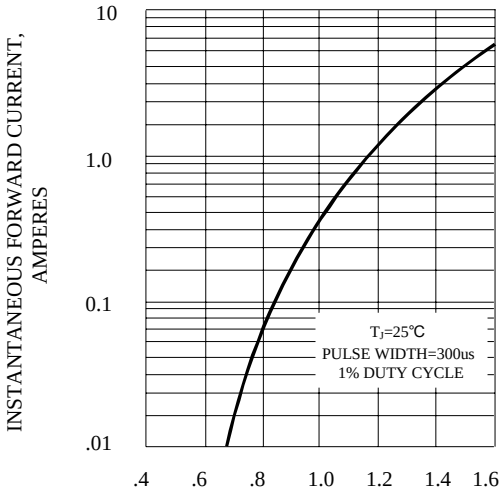



FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

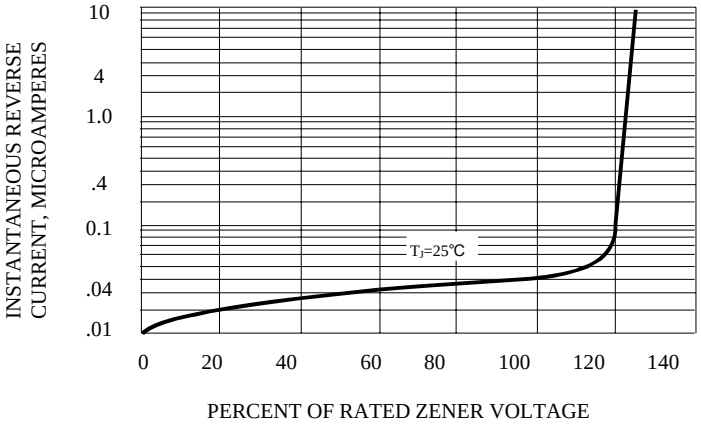



FIG. 5 - TYPICAL TEMPERATURE COEFFICIENTS

