



# CHENMKO ENTERPRISE CO.,LTD

**TRANSIENT VOLTAGE SUPPRESSOR ARRAY SERIES**  
**VOLTAGE 4V TO 40 VOLTS**  
**300 WATTS PEAK PULSE POWER**

**TVS2303GP**  
**THRU**  
**TVS2336GP**

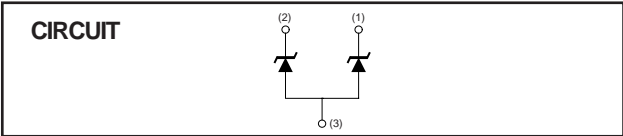
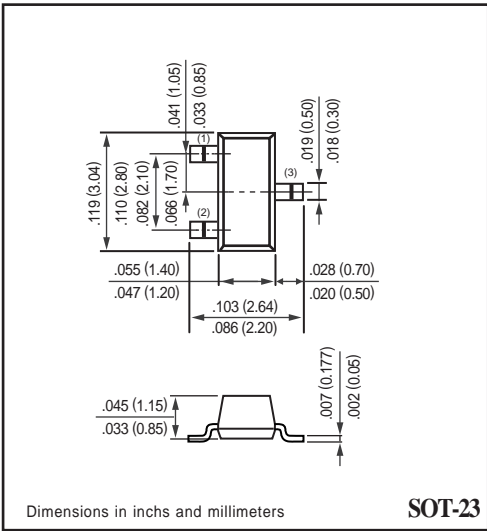
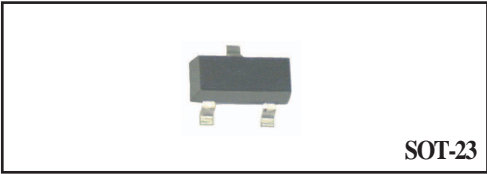
*Halogens free devices*

**FEATURES**

- \*Unidirectional or Bidirectional
- \* 300W peak pulse power dissipation rating at  $t_p = 8X20\mu\text{Sec}$
- \* Low leakage current
- \*Provide Electrically Isolated Protection
- \* High temperature soldering guaranteed :  
260°C/10 seconds at terminals

**MECHANICAL DATA**

**Case:** JEDEC SOT-23 molded plastic  
**Terminals:** Solderable per MIL-STD-750, Method 2026  
**Polarity:** See connection diagram  
**Mounting Position:** Any



**MAXIMUM RATINGS** ( At  $T_A = 25^\circ\text{C}$  unless otherwise noted )

| RATINGS                                       | SYMBOL    | VALUE       | UNITS            |
|---|-----------|-------------|------------------|
| Peak Pulse Power at $t_p = 8X20\mu\text{Sec}$ | PPK       | 300         | Watts            |
| Operating Temperature Range                   | $T_J$     | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature Range                     | $T_{STG}$ | -55 to +150 | $^\circ\text{C}$ |

**ELECTRICAL CHARACTERISTICS** ( At  $T_A = 25^\circ\text{C}$  unless otherwise noted )

| PRODUCT NO. | Breakdown Voltage |      |                | Working Peak Reverse Voltage | Maximum Reverse Leakage at $V_{rwm}$ | Maximum Reverse Current | Maximum Reverse Voltage at $I_{pp}$ ( clamping ) | Maximum Capacitance at 0V / 1MHZ Pin 1-3 or 2-3 | Maximum Capacitance at 0V / 1MHZ Pin 1-2 |
|-------------|-------------------|------|----------------|------------------------------|--------------------------------------|-------------------------|--|---|--|
|             | VBR Volts         |      | @ $I_T$ ( mA ) |                              |                                      |                         |  |   |  |
|             | MIN.              | MAX. |                |                              |                                      |                         |  |   |  |
|             |                   |      |                | $V_{rwm}$ ( V )              | $I_r$ ( $\mu\text{A}$ )              | $I_{pp}$ ( A )          | $V_c$ ( V )                                      | $C_T$ ( pF )                                    | $C_v$ ( pF )                             |
| TVS2303GP   | 4.0               | -    | 1.0            | 3.3                          | 200                                  | 1.0                     | 8.0  | 600   | 300                                      |
| TVS2305GP   | 6.0               | -    | 1.0            | 5.0                          | 20                                   | 1.0                     | 10.8   | 400   | 200                                      |
| TVS2312GP   | 13.3              | -    | 1.0            | 12                           | 0.1                                  | 1.0                     | 19   | 160   | 80                                       |
| TVS2315GP   | 16.7              | -    | 1.0            | 15                           | 0.1                                  | 1.0                     | 25   | 130   | 65                                       |
| TVS2324GP   | 26.7              | -    | 1.0            | 24                           | 0.1                                  | 1.0                     | 44   | 80  | 40                                       |
| TVS2336GP   | 40.0              | -    | 1.0            | 36                           | 0.1                                  | 1.0                     | 60   | 50  | 28                                       |

## RATING CHARACTERISTIC CURVES ( TVS2303GP ~ TVS2336GP )

