# CHENMKO ENTERPRISE CO.,LTD

**TVS05GP**

Halogens free devices

***STANDARD CAPACITANCE TVS ARRAY***

*VOLTAGE 5 V*

*300 WATTS PEAK PULSE POWER*

## FEATURES

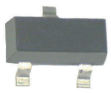
* 300W peak pulse power dissipation rating at tp= 8X20uSec
* Low leakage current
*Protects one power or I/O port
* High temperature soldering guaranteed : 260°C/10 seconds at terminals

## MECHANICAL DATA

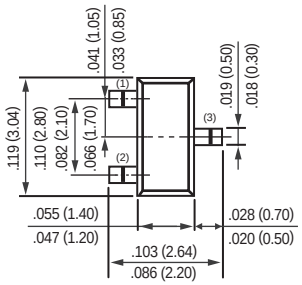
**Case:** JEDEC SOT-23 molded plastic
**Polarity:** See connection diagram
**Mounting Position:** Any

## MARKING

**05C**



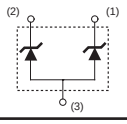
SOT-23




Dimensions in millimeters

SOT-23

## CIRCUIT




**MAXIMUM RATINGES** ( At $T_A$ = 25°C unless otherwise noted )

| RATINGS | SYMBOL | VALUE | UNITS |
|---|---|---|---|
| Peak Pulse Power at $t_p$ = 8X20uSec | $P_{PK}$ | 300 | Watts |
| Operating Temperature Range | $T_J$ | -55 to +125 | °C |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | °C |

**ELECTRICAL CHARACTERISTICS** ( At $T_A$ = 25°C unless otherwise noted )

| PRODUCT NO. | Breakdown Voltage | | | | Working Peak Reverse Voltage | Maximum Reverse Leakage at Vrwm | Maximum Reverse Current | Maximum Reverse Voltage at Ipp ( clamping ) | Typical Junction Capacitance (Note 1) |
|---|---|---|---|---|---|---|---|---|---|
| | VBR Volts | | | @ IT ( mA ) | | | | | |
| | MIN. | NOM. | MAX. | | Vrwm ( V ) | Ir ( uA ) | Ipp ( A ) | Vc ( V ) | $C_T$ ( pF ) |
| TVS05GP | 6.0 | - | - | 1.0 | 5.0 | 20 | 1 | 9.8 | 400 |

2005-12

**Note**

1. Pin1 to Pin3 & Pin2 tp Pin3 at Vr=0V, f=1MHz.

# RATING CHARACTERISTIC CURVES ( TVS05GP )

FIG. 1 - PULSE WARE FORM

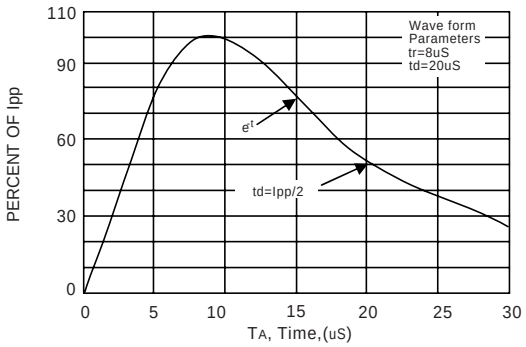



FIG. 2 - NONREPETITIVE PEAK PULSE POWER CURVES

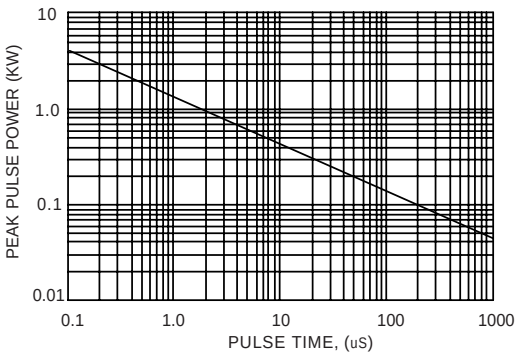



FIG. 3 - POWER DERATING CURVE

