# JSOT05C-EVL
## STANDARD CAPACITANCE TVS ARRAY

VENKEL LTD.

| PART NUMBER | PACKAGE | VOLTAGE | POWER | CIRCUIT CONFIGURATION |
|---|---|---|---|---|
| JSOT05C-□VL<br>E = 7" Embossed T&R (3,000)<br>U = 13" Embossed T&R (12,000) | SOT-23 | 5-24V | 250W | COMMON ANODE |

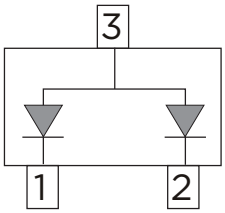
## FEATURES:

- 250 Watts Peak Pulse Power per Line ( tp=8/20 ms)
- Low Clamping Voltage
- Available in Multiple Voltage Types Ranging from 5V
- IEC 61000-4-2 ±15kV Air, ±8kV Contact

## MECHANICAL DATA:

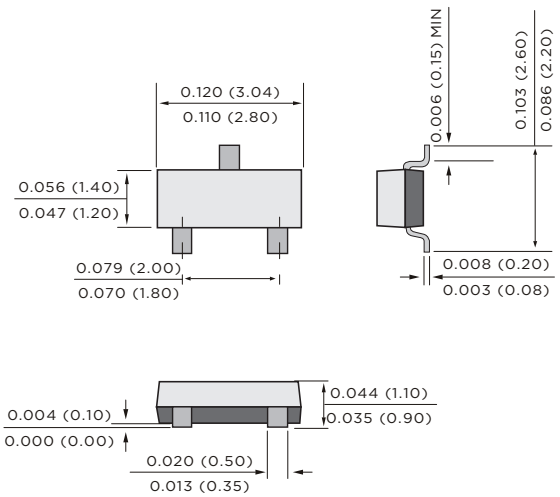
- Case: SOT-23
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 0.0003 ounces, 0.0084 grams

COMMON ANODE




## SOT-23

Units: inch (mm)




## MAXIMUM RATINGS

Ratings @ 25°C unless otherwise specified

| PARAMETER | SYMBOL | VALUE | UNITS |
|---|---|---|---|
| Peak Pulse Power (tp=8/20µs) (NOTES 1,2) | $P_{PP}$ | 250 | W |
| Forward Voltage @ 100mA, 300µs - Square Wave | $V_F$ | 1.5 | V |
| Peak Pulse Current on 10/1000µs waveform (NOTE 1) | $I_{PPM}$ | see table | A |
| Operating Temperature Range | $T_J$ | -50 to +150 | °C |
| Storage Temperature Range | $T_{STG}$ | -50 to +150 | °C |

## ENVIRONMENTAL INFORMATION

| | |
|---|---|
| **RoHS Status** | 10 of 10 Compliant |
| **REACH Status** | Compliant |
| **Halogen Status** | Halogen Free |
| **Conflict Mineral Status** | Conflict Mineral Free |
| **Moisture Sensitivity Level (MSL)** | 1 |

## ELECTRICAL CHARACTERISTICS

| PART NUMBER | REVERSE STANDOFF VOLTAGE | MINIMUM BREAKDOWN VOLTAGE | MAX CLAMPING VOLTAGE @ 8/20µsec | PEAK PULSE CURRENT @ 8/20µsec | MAXIMUM LEAKAGE CURRENT | OFF-STATE CAPACITANCE 1MHz ZERO DC BIAS | MARKING CODE |
|---|---|---|---|---|---|---|---|
| | $V_{RWM}$ (NOTE 3) | @ 1mA $V_{BR}$ | $V_{CL}$ @ $I_{PP}$ | $I_{PP}$ | @ $V_{RWM}$ $I_D$ | $C_D$ | |
| | MAX. V | V | V | MAX. A | µA | MAX. pF | |
| JSOT05C-□VL | 5 | 6 | 12.6 | 21 | 20 | 250 | 2DC |

**NOTES:**

1. Non-repetitive current pulse.
2. Mounted on copper pads to each terminal.
3. A transient suppressor is selected according to the working peak reverse voltage ($V_{RWM}$), which should be equal to or greater than the DC or continuous peak operating voltage level.

## CHARACTERISTIC CURVES

**Fig.1** Typical Capacitance

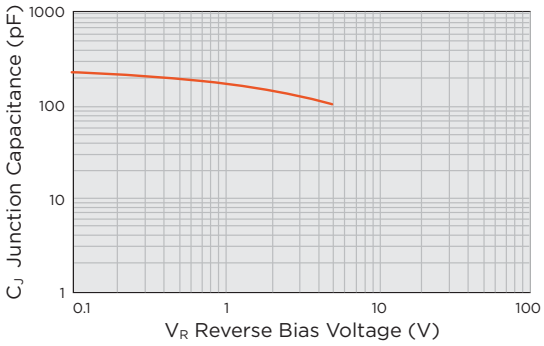



**Fig.2** Pulse Waveform

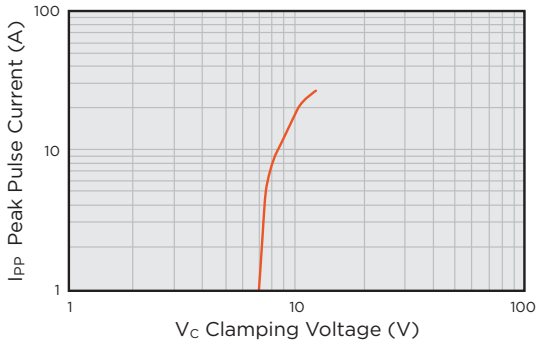
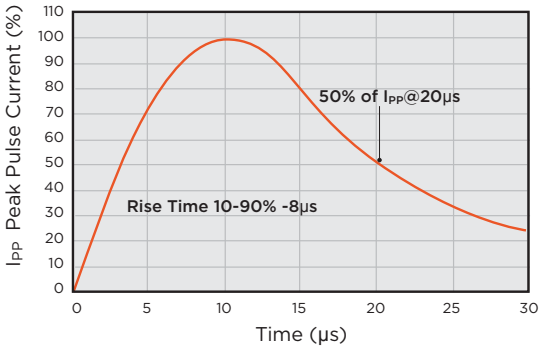



**Fig.3** Pulse Waveform




## MOUNTING PAD LAYOUT

Units: inch (mm)