

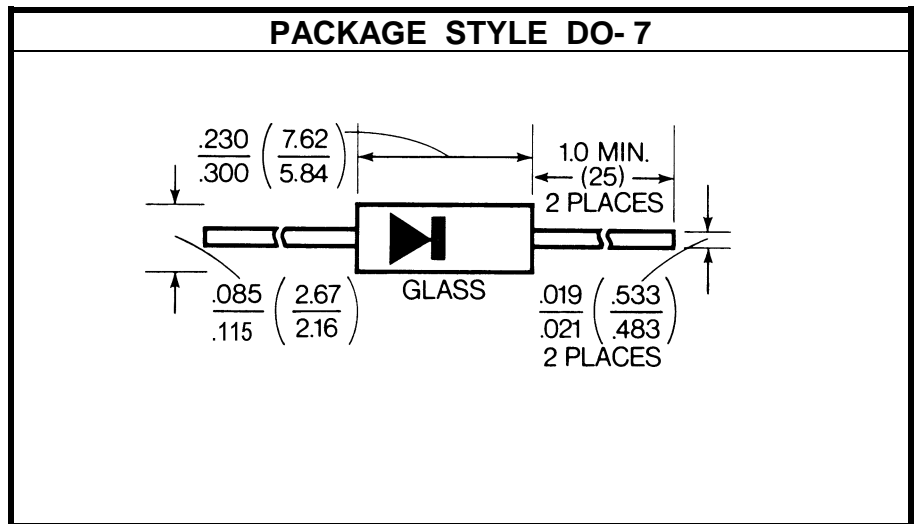
# SILICON HYPERABRUPT TUNING DIODE

**DESCRIPTION:**

The **ASI KV3901** Varactor Diode is Designed for General Purpose Tuning Applications. The Cathode is Indicated by a Band.

**MAXIMUM RATINGS**

|                         |                                 |
|-------------------------|---------------------------------|
| <b>I<sub>F</sub></b>    | 200 mA                          |
| <b>V<sub>R</sub></b>    | 30 V                            |
| <b>P<sub>DISS</sub></b> | 400 mW @ T <sub>A</sub> = 25 °C |
| <b>T<sub>J</sub></b>    | -65 °C to +125 °C               |
| <b>T<sub>STG</sub></b>  | -65 °C to +150 °C               |


**CHARACTERISTICS** T<sub>A</sub> = 25 °C

| SYMBOL                  | TEST CONDITIONS             |             | MINIMUM | TYPICAL | MAXIMUM | UNITS      |
|-------------------------|-----------------------------|-------------|---------|---------|---------|------------|
| <b>V<sub>R</sub></b>    | I <sub>R</sub> = 10 μA      |             | 30      |         |         | <b>V</b>   |
| <b>I<sub>R</sub></b>    | V <sub>R</sub> = 28 V       |             |         |         | 50      | <b>μA</b>  |
| <b>C<sub>T-3</sub></b>  | V <sub>R</sub> = -3.0 V     | f = 1.0 MHz | 26      | 29      | 32      | <b>pF</b>  |
| <b>C<sub>T-25</sub></b> | V <sub>R</sub> = -25 V      | f = 1.0 MHz | 4.5     | 5.1     | 6.0     | <b>pF</b>  |
| <b>ΔC<sub>T</sub></b>   | V <sub>R</sub> = -3 to -25V | f = 1.0 MHz | 5.0     | 5.7     | 6.5     | <b>---</b> |
| <b>Q</b>                | V <sub>R</sub> = -3.0 V     | f = 50 MHz  | 200     | 280     |         |            |